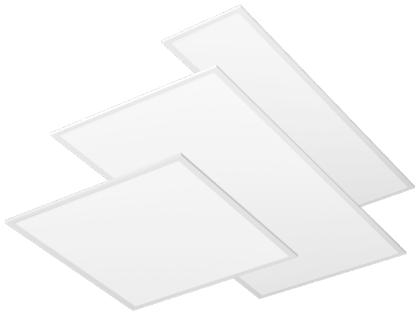
Project:		Catalog #:		Type:	
Prepared by:		Notes:		Date:	

E1BPL

LED Back-lit Flat Panel
Fixed CCT | 1x4, 2x2, 2x4
5-yr Warranty



OVERVIEW

Energetic Lighting's E1BPL series is suitable for use in a broad range of commercial applications. Utilizing today's latest innovative LED solutions and technologies paired with world class manufacturing practices, the E1BPL provides customers an affordable LED back-lit panel offering with the perfect blend of design, performance, value and reliability.

An extremely versatile product thanks to its low-profile design that is as shallow as many other higher priced edge-lit panels available today. As a result the E1BPL is well suited for installations with shallow plenum access.

The E1BPL is a great choice for renovation opportunities replacing existing fluorescent luminaires or for new construction projects that require code compliant energy saving LED solutions. Ideally suited for office spaces, schools, retail, hospitality and healthcare applications, the E1BPL provides high quality illumination with optimal energy savings.

KEY FEATURES

- 1x4, 2x2 and 2x4 configurations available for design flexibility
- All configurations are DLC Premium qualified = maximized rebates
- 126 to 131 LPW provides 40-60% in energy savings vs. fluorescent
- Acrylic over-optics w/ polymer diffusing lens creates an extremely uniform visual aesthetic and provides targeted uniform illumination
- Ultra low-profile design (1.375"H) ideal for shallow plenum installs
- Die-formed steel housing won't flex during installation
- Extruded aluminum lens frame with visually seamless corners
- Reduced weight design makes for easier installation (1x4 & 2x4 @ 4.9 lbs, 2x4 @ 8.8 lbs = as much as 50% less vs. edge-lit fixtures)
- Multiple KOs w/ easy access wiring box = reduced installation time
- Available in 3500K, 4000K & 5000K @ >80 CRI for design flexibility
- 120-277V, 347V drivers with 0-10V dimming standard
- 88.8% lumen maintenance @ 60,000 hours - L89/60,000 (per IES TM21)
- Projected L70 @ 178,000 hours = maintenance free illumination (per IES TM21)

SPECIFICATIONS & FEATURES

Construction

Housing is made from die-formed steel to ensure rigid, durable and repeatable construction. Extruded aluminum lens frame with mitered corners is secured to the housing with visually seamless corners. All painted components are high reflectance white powder coat for improved optical performance and enhanced visual aesthetic.

Installation & Mounting

Designed for T-Grid mounting and installation, multiple integral grid clips easily fold to secure during installation. Contractor friendly design includes code gauge galvanized steel j-box with multiple knockouts and single screw access cover for ease of installation and wiring. Suitable for up to 12AWG wiring. Additional surface mount and suspension mount accessories are available for grid use or to mount to other direct surfaces or structures.

Optics

Uniform horizontal and vertical illumination is achieved by the coupling of the high performance LED platform array with acrylic over-optics and a white polymer diffusing lens. The optical system creates a soft and uniform visual appearance with no LED pixelation from the entire visible lens surface area. Providing both superior visual comfort and pleasing illuminated aesthetic. The textured polymer diffusing lens is extremely resistant to smudges, accidental damage and scratches during installation and cleaning.

Electrical

Efficient long life LED platform array is coupled with 50,000 hour rated drivers to help deliver optimal performance and quality illumination for the extended life of the luminaire. 88.8% LED lumen maintenance at 60,000 hours (L89/60,000) per IES TM21. Projected L70 @ 178,000 hours. Drivers are rated for 120-277V, 347V applications and are 0-10V dimming compatible standard. Drivers are rated for FCC part 15 Class B use in residential and commercial applications.

Compliance & Certification

All luminaires are built to UL1598 standards with appropriate UL/cUL labels for indoor use up to 40° C ambient environments. Suitable for damp location use. IC rated for direct insulation contact. FCC part 15 Class B. Adheres to LM79, LM80 and TM21 industry standards for performance and lifetime calculations. DesignLights Consortium® (DLC) Premium qualified product. Refer to DLC website at www.designlights.org/QPL to confirm which specific product configurations are qualified.

Warranty

The E1BPL series of luminaires ships with Energetic's 5-year standard warranty. (Terms & Conditions apply).

Load Information

Power Factor	0.89 (1x4)
	0.89 (2x2)
	0.89 | 0.92 (2x4, 36W | 39W)
THD	13.9% (1x4)
	13.5% (2x2)
	12.1% | 11.8% (2x4, 36W | 39W)
Low Temp	-20° C
Max Temp	40° C
Unit Weight	4.9 lbs (1x4)
Unit Weight	4.9 lbs (2x2)
Unit Weight	8.8 lbs (2x4)

Shipping Information

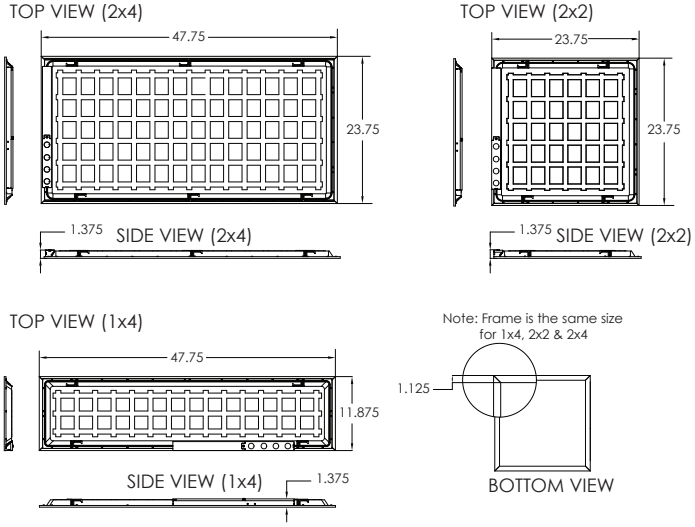
Size	Weight[1]	Box Qty[2]	Pallet Qty[3,4]
1x4	13.0 lbs	2 per	90 units per
2x2	12.2 lbs	2 per	100 units per
2x4	22.2 lbs	2 per	60 units per

1. Shipping weights shown are for 2-fixtures per box.
2. Fixtures ship loose 2 per box with no inner case/boxes.
3. The # of boxes per pallet = units per divided by 2.
4. 1x4 pallet dimensions = 51"l x 43"w x 65"h
   2x2 pallet dimensions = 54"l x 40"w x 79"h
   2x4 pallet dimensions = 51"l x 40"w x 85"h

Lumen Maintenance

Ambient Temp	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25° C	> 88.8%	178,000

Dimensions



Energetic Lighting
13445 12th Street, Chino, CA 91710 | TEL: 866-492-6566 909-591-2345 | FAX: 909-591-2448
E-mail: info@energeticlighting.com | www.energeticlighting.com

Specifications are subject to change without notice.
All values are nominal or typical values, measured under laboratory conditions @ 25° C.
Actual performance may vary slightly as a result of end-user environment/application.

1x4 STOCK ORDERING INFORMATION (base fixture only)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E1BPL1-H30D-835	65077	1x4	3689	29.3	126	3500K	83	120-277, 347	0-10V[1]	Premium	90
E1BPL1-H30D-840	65078	1x4	3736	29.3	128	4000K	83	120-277, 347	0-10V[1]	Premium	90
E1BPL1-H30D-850	65079	1x4	3830	29.7	129	5000K	83	120-277, 347	0-10V[1]	Premium	90

2x2 STOCK ORDERING INFORMATION (base fixture only)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E1BPL2-H30D-835	65086	2x2	3698	29.3	126	3500K	83	120-277, 347	0-10V[1]	Premium	100
E1BPL2-H30D-840	65087	2x2	3742	29.3	128	4000K	83	120-277, 347	0-10V[1]	Premium	100
E1BPL2-H30D-850	65088	2x2	3830	29.5	130	5000K	83	120-277, 347	0-10V[1]	Premium	100

2x4 STOCK ORDERING INFORMATION (base fixture only)

Catalog Logic	Order #	Size	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E1BPL4-H36D-835	65104	2x4	4543	35.6	128	3500K	83	120-277, 347	0-10V[1]	Premium	60
E1BPL4-H36D-840	65105	2x4	4588	35.6	129	4000K	83	120-277, 347	0-10V[1]	Premium	60
E1BPL4-H36D-850	65106	2x4	4679	35.7	131	5000K	83	120-277, 347	0-10V[1]	Premium	60
E1BPL4-H40D-835	65113	2x4	4941	39.0	127	3500K	83	120-277, 347	0-10V[1]	Premium	60
E1BPL4-H40D-840	65114	2x4	4993	39.0	128	4000K	83	120-277, 347	0-10V[1]	Premium	60
E1BPL4-H40D-850	65115	2x4	5097	38.9	131	5000K	83	120-277, 347	0-10V[1]	Premium	60

Notes:
1. 0-10V dimming driver standard, leads are capped from the factory, dims to 10%.

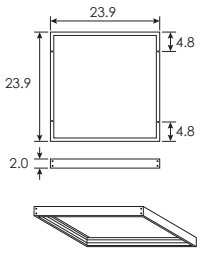
MOUNTING ACCESSORIES
(must be ordered separately...available to ship March/April 2020)

Catalog Logic	Order #	Description
FPSURF14[1]	65150	Flat panel surface mount kit 1x4
FPSURF22[1]	65151	Flat panel surface mount kit 2x2
FPSURF24[1]	65152	Flat panel surface mount kit 2x4
FPSUSP[2]	65153	Flat panel suspension mount kit (all sizes)

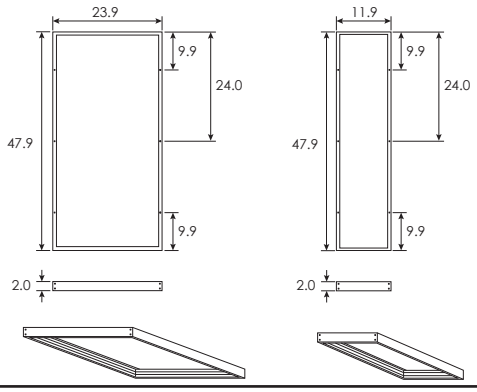
Notes:
1. Surface mount kits ship disassembled for reduced package size and ease of shipping. (some field assembly required, see instruction sheets for details)
2. The 'FPSUSP' suspension mount kits can be used with a stand alone luminaire or can be used along with the surface mount kits for a different architectural aesthetic. (some field assembly required, see instruction sheets for details)

Surface Mount Kit Dimensions

FPSURF22

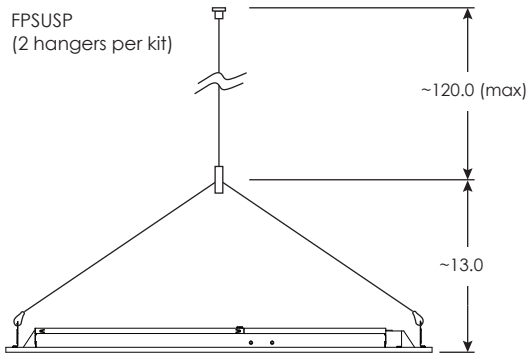


FPSURF24



Suspension Mount Dimensions

FPSUSP
(2 hangers per kit)



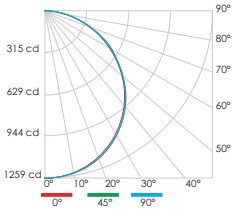
1x4, 4000K, 30W PHOTOMETRIC DATA

Luminaire Data

Cat Logic: E1BPL1-H30D-840
Test Report: E1BPL1-H30D-840.IES
CCT: 4000
Lamp Type: LED
Lumens: 3736
Input Watts: 29.0
Efficacy: 129
Spacing: 0° = 1.26 90° = 1.28

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	983	26.3
0-40	1615	43.2
0-60	2881	77.1
0-90	3732	99.9
0-180	3736	100.0

Candlepower

Angle	0°	90°
0	1259	1259
5	1252	1253
10	1234	1238
15	1207	1212
20	1168	1176
25	1120	1129
30	1063	1073
35	996	1008
40	922	934
45	840	853
50	752	765
55	658	671
60	560	572
65	459	471
70	358	370
75	258	269
80	161	170
85	69	77
90	0.5	0.1

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	**119**	**119**	**119**	**119**	**116**	**116**	**116**	**116**	**111**	**111**	**111**	**106**	**106**	**106**	**102**	**102**	**102**	**100**
1	**108**	**103**	**99**	**95**	**106**	**101**	**97**	**93**	**97**	**93**	**90**	**93**	**90**	**88**	**89**	**87**	**85**	**83**
2	**98**	**90**	**83**	**77**	**96**	**88**	**81**	**76**	**84**	**79**	**74**	**81**	**76**	**72**	**78**	**74**	**71**	**68**
3	**89**	**79**	**70**	**63**	**87**	**77**	**69**	**63**	**74**	**67**	**62**	**71**	**65**	**61**	**68**	**64**	**60**	**57**
4	**82**	**69**	**60**	**54**	**79**	**68**	**60**	**53**	**66**	**58**	**52**	**63**	**57**	**52**	**61**	**55**	**51**	**49**
5	**75**	**62**	**53**	**46**	**73**	**61**	**52**	**46**	**59**	**51**	**45**	**57**	**50**	**45**	**55**	**49**	**44**	**42**
6	**69**	**56**	**47**	**40**	**67**	**55**	**46**	**40**	**53**	**45**	**39**	**51**	**44**	**39**	**50**	**43**	**39**	**37**
7	**64**	**50**	**42**	**35**	**62**	**50**	**41**	**35**	**48**	**40**	**35**	**47**	**40**	**35**	**45**	**39**	**34**	**32**
8	**60**	**46**	**37**	**31**	**58**	**45**	**37**	**31**	**44**	**36**	**31**	**43**	**36**	**31**	**41**	**35**	**31**	**29**
9	**56**	**42**	**34**	**28**	**54**	**42**	**34**	**28**	**40**	**33**	**28**	**39**	**33**	**28**	**38**	**32**	**28**	**26**
10	**52**	**39**	**31**	**26**	**51**	**38**	**31**	**26**	**37**	**30**	**25**	**36**	**30**	**25**	**35**	**29**	**25**	**23**

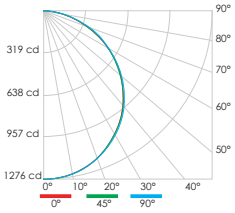
2x2, 4000K, 30W PHOTOMETRIC DATA

Luminaire Data

Cat Logic: E1BPL2-H30D-840
Test Report: E1BPL2-H30D-840.IES
CCT: 4000
Lamp Type: LED
Lumens: 3742
Input Watts: 29.0
Efficacy: 129
Spacing: 0° = 1.26 90° = 1.28

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	994	26.6
0-40	1631	43.6
0-60	2900	77.5
0-90	3738	99.9
0-180	3742	100.0

Candlepower

Angle	0°	90°
0	1276	1276
5	1270	1271
10	1252	1255
15	1224	1228
20	1186	1191
25	1137	1145
30	1078	1087
35	1011	1021
40	935	947
45	852	864
50	762	774
55	667	679
60	567	580
65	465	479
70	362	376
75	260	271
80	160	169
85	66	74
90	0.2	5

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	**119**	**119**	**119**	**119**	**116**	**116**	**116**	**116**	**111**	**111**	**111**	**106**	**106**	**106**	**102**	**102**	**102**	**100**
1	**108**	**103**	**99**	**95**	**106**	**101**	**97**	**94**	**97**	**94**	**91**	**93**	**90**	**88**	**89**	**87**	**85**	**83**
2	**98**	**90**	**83**	**77**	**96**	**88**	**82**	**76**	**84**	**79**	**74**	**81**	**77**	**73**	**78**	**74**	**71**	**69**
3	**90**	**79**	**70**	**64**	**87**	**77**	**69**	**63**	**74**	**67**	**62**	**71**	**66**	**61**	**69**	**64**	**60**	**58**
4	**82**	**70**	**61**	**54**	**80**	**68**	**60**	**53**	**66**	**58**	**53**	**63**	**57**	**52**	**61**	**56**	**51**	**49**
5	**75**	**62**	**53**	**46**	**73**	**61**	**52**	**46**	**59**	**51**	**45**	**57**	**50**	**45**	**55**	**49**	**44**	**42**
6	**69**	**56**	**47**	**40**	**67**	**55**	**46**	**40**	**53**	**45**	**40**	**51**	**45**	**39**	**50**	**44**	**39**	**37**
7	**64**	**51**	**42**	**36**	**63**	**50**	**41**	**35**	**48**	**41**	**35**	**47**	**40**	**35**	**45**	**39**	**35**	**33**
8	**60**	**46**	**38**	**32**	**58**	**45**	**37**	**32**	**44**	**37**	**31**	**43**	**36**	**31**	**42**	**36**	**31**	**29**
9	**56**	**42**	**34**	**28**	**54**	**42**	**34**	**28**	**41**	**33**	**28**	**39**	**33**	**28**	**38**	**32**	**28**	**26**
10	**52**	**39**	**31**	**26**	**51**	**39**	**31**	**26**	**38**	**30**	**26**	**37**	**30**	**25**	**36**	**30**	**25**	**24**

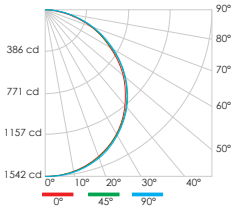
2x4, 4000K, 30W PHOTOMETRIC DATA

Luminaire Data

Cat Logic:	E1BPL4-H36D-840
Test Report:	E1BPL4-H36D-840.IES
CCT:	4000
Lamp Type:	LED
Lumens:	4588
Input Watts:	35.4
Efficacy:	130
Spacing:	0° = 1.28 90° = 1.28

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1207	26.3
0-40	1988	43.3
0-60	3550	77.4
0-90	4585	99.9
0-180	4588	100.0

Candlepower

Angle	0°	90°
0	1541	1541
5	1534	1537
10	1515	1520
15	1484	1491
20	1440	1449
25	1384	1395
30	1315	1329
35	1234	1252
40	1142	1164
45	1040	1085
50	929	958
55	811	843
60	689	722
65	562	596
70	435	469
75	311	342
80	192	217
85	80	97
90	0.6	2

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	**119**	**119**	**119**	**119**	**116**	**116**	**116**	**116**	**111**	**111**	**111**	**106**	**106**	**106**	**102**	**102**	**102**	**100**
1	**108**	**103**	**99**	**95**	**106**	**101**	**97**	**93**	**97**	**94**	**90**	**93**	**90**	**88**	**89**	**87**	**85**	**83**
2	**98**	**90**	**83**	**77**	**96**	**88**	**81**	**76**	**84**	**79**	**74**	**81**	**76**	**72**	**78**	**74**	**71**	**69**
3	**89**	**79**	**70**	**64**	**87**	**77**	**69**	**63**	**74**	**67**	**62**	**71**	**66**	**61**	**69**	**64**	**60**	**57**
4	**82**	**70**	**61**	**54**	**79**	**68**	**60**	**53**	**66**	**58**	**53**	**63**	**57**	**52**	**61**	**56**	**51**	**49**
5	**75**	**62**	**53**	**46**	**73**	**61**	**52**	**46**	**59**	**51**	**45**	**57**	**50**	**45**	**55**	**49**	**44**	**42**
6	**69**	**56**	**47**	**40**	**67**	**55**	**46**	**40**	**53**	**45**	**40**	**51**	**44**	**39**	**50**	**44**	**39**	**37**
7	**64**	**50**	**42**	**35**	**62**	**50**	**41**	**35**	**48**	**40**	**35**	**47**	**40**	**35**	**45**	**39**	**34**	**32**
8	**60**	**46**	**37**	**31**	**58**	**45**	**37**	**31**	**44**	**36**	**31**	**43**	**36**	**31**	**42**	**35**	**31**	**29**
9	**56**	**42**	**34**	**28**	**54**	**42**	**34**	**28**	**40**	**33**	**28**	**39**	**33**	**28**	**38**	**32**	**28**	**26**
10	**52**	**39**	**31**	**26**	**51**	**38**	**31**	**26**	**37**	**30**	**25**	**36**	**30**	**25**	**36**	**30**	**25**	**23**

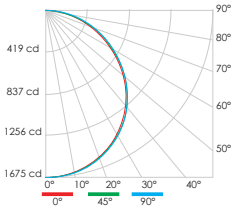
2x4, 4000K, 40W PHOTOMETRIC DATA

Luminaire Data

Cat Logic:	E1BPL4-H40D-840
Test Report:	E1BPL4-H40D-840.IES
CCT:	4000
Lamp Type:	LED
Lumens:	4993
Input Watts:	39.0
Efficacy:	128
Spacing:	0° = 1.28 90° = 1.28

Photometric values based on tests performed in compliance with LM-79.

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1311	26.3
0-40	2158	43.2
0-60	3855	77.2
0-90	4989	99.9
0-180	4993	100.0

Candlepower

Angle	0°	90°
0	1674	1674
5	1666	1670
10	1645	1652
15	1610	1619
20	1563	1574
25	1502	1515
30	1426	1443
35	1338	1358
40	1238	1262
45	1128	1155
50	1009	1039
55	882	915
60	752	786
65	616	651
70	478	514
75	344	372
80	213	233
85	90	102
90	0.6	0.3

Coefficients of Utilization

Effective Floor Cavity Reflectance 20%

rc	80%				70%				50%			30%			10%			0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	**119**	**119**	**119**	**119**	**116**	**116**	**116**	**116**	**111**	**111**	**111**	**106**	**106**	**106**	**102**	**102**	**102**	**100**
1	**108**	**103**	**99**	**95**	**106**	**101**	**97**	**93**	**97**	**93**	**90**	**93**	**90**	**88**	**89**	**87**	**85**	**83**
2	**98**	**90**	**83**	**77**	**96**	**88**	**81**	**76**	**84**	**79**	**74**	**81**	**76**	**72**	**78**	**74**	**71**	**68**
3	**89**	**79**	**70**	**64**	**87**	**77**	**69**	**63**	**74**	**67**	**62**	**71**	**65**	**61**	**69**	**64**	**60**	**57**
4	**82**	**69**	**60**	**54**	**79**	**68**	**60**	**53**	**66**	**58**	**52**	**63**	**57**	**52**	**61**	**56**	**51**	**49**
5	**75**	**62**	**53**	**46**	**73**	**61**	**52**	**46**	**59**	**51**	**45**	**57**	**50**	**45**	**55**	**49**	**44**	**42**
6	**69**	**56**	**47**	**40**	**67**	**55**	**46**	**40**	**53**	**45**	**39**	**51**	**44**	**39**	**50**	**43**	**39**	**37**
7	**64**	**50**	**42**	**35**	**62**	**50**	**41**	**35**	**48**	**40**	**35**	**47**	**40**	**35**	**45**	**39**	**34**	**32**
8	**60**	**46**	**37**	**31**	**58**	**45**	**37**	**31**	**44**	**36**	**31**	**43**	**36**	**31**	**41**	**35**	**31**	**29**
9	**56**	**42**	**34**	**28**	**54**	**42**	**34**	**28**	**40**	**33**	**28**	**39**	**33**	**28**	**38**	**32**	**28**	**26**
10	**52**	**39**	**31**	**26**	**51**	**38**	**31**	**25**	**37**	**30**	**25**	**36**	**30**	**25**	**35**	**29**	**25**	**23**

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