

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P246170

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20930 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1625.4 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

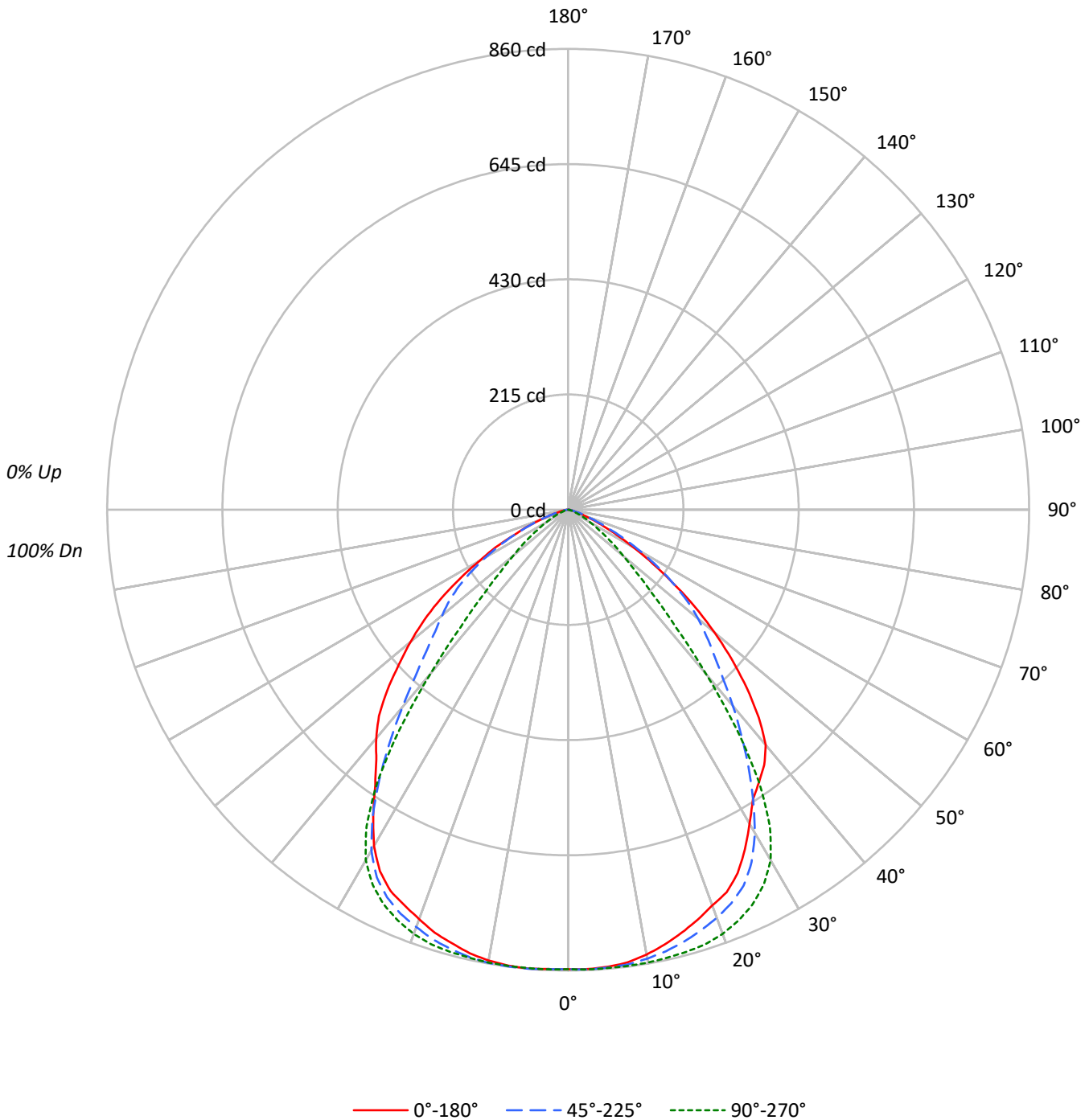
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	52	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	5.0
10°-20°	237.7	14.6
20°-30°	360.8	22.2
30°-40°	378.9	23.3
40°-50°	284.1	17.5
50°-60°	182.3	11.2
60°-70°	78.0	4.8
70°-80°	18.4	1.1
80°-90°	3.4	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	680.3	41.9
0°-40°	1059.3	65.2
0°-60°	1525.6	93.9
0°-90°	1625.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	858	858	858	858	858	
5°	856	858	859	860	860	81
15°	818	835	854	848	838	231
25°	748	774	813	799	785	342
35°	621	586	621	614	627	389
45°	471	385	221	374	478	361
55°	238	238	82	249	290	216
65°	72	85	26	109	111	77
75°	11	13	4	22	22	16
85°	4	2	2	4	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6
2.5°	858.1	859.0	858.6	858.6	858.1	858.6	858.6	859.5	859.5	858.6	858.1
5°	856.2	857.1	857.1	856.2	856.2	858.6	857.1	858.1	858.1	857.6	857.6
7.5°	852.1	852.1	854.0	852.5	852.5	854.0	853.5	854.4	855.3	855.8	855.8
10°	842.9	843.8	844.2	844.2	844.8	846.1	847.0	848.9	849.8	850.7	851.2
12.5°	831.3	832.8	833.2	832.8	834.1	835.9	838.3	840.6	842.0	843.8	845.2
15°	817.5	817.5	818.4	819.9	820.8	823.6	825.8	828.6	832.3	834.6	836.9
17.5°	802.4	803.3	804.7	804.7	806.6	811.2	812.5	816.6	820.8	823.2	827.7
20°	785.8	786.7	788.1	789.1	791.3	795.0	797.8	801.4	806.1	810.3	814.9
22.5°	772.9	771.0	772.0	772.9	775.2	778.4	781.7	786.3	790.9	795.0	799.6
25°	748.0	748.5	749.9	750.8	753.5	756.3	760.0	765.5	769.7	774.3	779.3
27.5°	714.4	714.9	717.2	717.2	719.5	724.2	726.4	731.0	736.6	741.2	747.1
30°	676.3	677.2	677.2	679.0	680.3	682.7	685.0	689.6	692.3	696.5	704.8
32.5°	641.2	642.2	641.7	641.2	639.9	639.4	639.0	639.9	640.8	642.2	645.4
35°	620.6	618.2	616.4	613.2	609.5	604.9	600.7	595.3	590.2	586.1	581.5
37.5°	600.7	600.3	597.5	592.9	585.5	577.3	567.6	555.7	543.7	530.8	518.4
40°	573.2	571.7	569.5	563.0	554.7	544.6	531.7	517.0	497.6	477.9	457.6
42.5°	526.2	526.6	523.8	518.8	511.0	501.3	488.0	471.8	451.1	427.7	401.4
45°	471.4	471.4	470.5	466.3	460.8	453.0	442.8	429.5	409.3	385.3	357.3
47.5°	414.3	414.8	413.4	412.4	410.2	405.1	397.7	387.6	373.3	350.3	322.3
50°	356.3	356.3	358.6	358.2	358.2	356.3	353.1	347.1	334.6	316.2	290.0
52.5°	298.3	299.2	300.7	302.4	304.8	308.4	304.8	302.0	294.2	279.9	257.4
55°	238.4	239.3	241.7	244.9	247.6	251.3	252.2	252.2	248.1	238.4	221.4
57.5°	187.3	186.0	187.9	190.6	194.3	198.0	200.7	203.9	203.5	197.1	183.2
60°	140.9	141.4	142.7	145.5	148.2	151.4	155.1	157.9	159.3	156.0	147.3
62.5°	102.7	102.7	104.5	107.3	108.6	113.2	115.6	116.9	118.3	117.8	112.3
65°	71.9	72.8	73.6	75.0	76.5	79.1	80.6	83.3	84.2	84.7	80.6
67.5°	50.7	49.2	50.2	51.1	52.5	54.4	57.1	57.1	58.4	58.4	55.7
70°	32.2	32.2	32.7	34.1	35.0	35.4	36.3	37.3	38.7	38.2	38.2
72.5°	21.6	21.2	21.6	22.1	22.5	24.0	24.0	24.4	25.3	25.8	24.0
75°	11.1	11.5	12.4	12.0	13.3	12.4	12.9	14.2	13.8	12.9	12.9
77.5°	9.2	9.2	9.2	8.7	9.6	9.6	9.2	10.1	9.6	9.6	9.2
80°	6.4	7.0	6.4	5.9	6.4	5.9	5.9	5.9	5.9	5.9	5.5
82.5°	5.0	4.1	4.6	4.1	4.6	4.6	4.1	3.7	3.7	4.1	3.7
85°	3.7	2.8	3.3	3.3	2.8	2.8	2.8	2.8	2.8	2.2	2.2
87.5°	2.2	1.3	1.3	1.3	1.8	1.8	1.8	1.3	1.8	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6
2.5°	859.0	858.6	859.5	859.0	859.0	858.6	859.0	858.6	859.5	857.6	858.1
5°	859.0	858.1	858.6	859.0	859.5	858.6	858.6	858.6	859.5	858.6	859.0
7.5°	857.1	856.7	858.1	859.0	858.6	858.1	859.0	858.6	859.5	859.0	859.9
10°	853.5	854.0	854.9	856.2	856.7	857.1	858.1	858.1	859.5	857.6	858.6
12.5°	847.9	849.8	852.1	853.0	854.9	854.9	855.8	856.2	857.1	856.7	858.1
15°	841.1	843.3	846.1	848.4	850.7	852.1	853.5	854.0	855.3	854.0	854.4
17.5°	832.8	835.5	839.6	842.4	846.1	847.5	849.4	850.3	851.6	850.7	851.2
20°	821.2	824.5	829.1	833.2	835.5	838.7	841.1	842.4	843.3	842.4	842.9
22.5°	805.1	809.7	815.8	819.0	823.6	826.3	826.7	830.0	832.3	830.0	830.9
25°	786.3	790.9	795.5	802.4	806.6	809.7	812.9	813.4	815.8	815.3	814.9
27.5°	755.0	760.9	768.8	774.3	779.8	784.9	788.6	789.5	791.8	790.9	791.3
30°	712.2	718.6	726.0	734.7	742.6	747.6	752.2	755.4	757.7	756.3	755.9
32.5°	651.4	657.8	665.6	674.4	683.6	691.0	696.5	700.6	703.4	702.5	700.2
35°	581.9	583.7	588.7	595.7	603.5	611.3	616.4	621.0	624.2	625.2	625.2
37.5°	510.5	504.6	500.9	500.9	505.5	508.7	513.3	516.0	521.2	522.9	524.3
40°	441.4	427.7	414.8	405.1	398.6	398.2	398.2	399.5	404.2	410.2	415.7
42.5°	379.8	357.7	337.9	319.9	307.0	299.6	296.5	297.0	300.7	306.1	315.3
45°	330.5	302.9	278.0	256.4	238.9	227.5	221.8	221.4	224.2	230.6	240.8
47.5°	292.4	262.9	234.7	210.0	191.0	178.6	172.2	170.3	172.2	178.1	190.1
50°	260.5	230.1	201.2	175.4	155.1	142.3	136.3	134.0	136.3	141.4	153.2
52.5°	231.0	199.8	172.6	147.7	126.1	115.1	108.6	107.3	108.6	114.6	124.3
55°	197.1	170.3	143.6	118.7	99.9	88.9	83.7	82.4	83.7	89.3	99.4
57.5°	163.4	140.3	116.9	94.4	78.2	68.6	64.0	62.1	65.4	69.1	81.0
60°	132.2	113.7	93.9	74.1	60.8	52.0	48.3	47.9	48.8	53.4	61.7
62.5°	103.6	88.3	72.8	56.6	45.6	41.9	37.3	36.9	37.8	40.5	47.0
65°	74.5	64.9	52.9	41.5	32.7	27.6	25.8	26.2	27.1	29.0	35.0
67.5°	52.0	45.1	36.9	29.0	22.5	20.3	18.4	17.9	18.4	21.6	24.9
70°	35.0	30.8	24.9	22.1	15.7	12.4	12.9	11.5	13.3	13.3	16.1
72.5°	23.0	20.3	16.6	12.9	11.1	8.7	8.7	8.3	9.2	9.6	12.0
75°	12.0	9.2	9.2	6.4	4.6	2.2	4.1	3.7	3.3	3.7	4.6
77.5°	8.3	7.0	6.4	5.0	4.6	3.7	3.7	3.7	3.7	4.1	4.6
80°	5.0	5.0	3.7	3.3	2.8	2.2	2.8	2.8	2.8	2.8	3.3
82.5°	3.3	2.8	2.8	2.2	2.2	1.8	1.8	1.8	1.8	1.8	2.8
85°	2.8	1.8	1.8	1.3	1.8	3.3	1.3	1.8	1.8	1.8	1.3
87.5°	0.9	1.3	1.3	1.3	0.9	0.4	0.9	1.3	1.3	2.2	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6	857.6
2.5°	859.0	859.5	859.5	859.0	859.0	858.1	859.9	858.6	859.0	860.8	859.5
5°	859.9	860.4	860.4	859.9	859.9	859.9	860.4	860.4	859.9	859.5	860.4
7.5°	861.7	861.3	861.3	860.4	860.4	859.5	860.4	859.0	859.9	859.0	860.4
10°	859.5	859.9	859.5	859.0	859.0	858.6	858.6	857.1	857.6	856.2	857.1
12.5°	858.1	857.6	857.6	856.7	855.8	854.9	854.4	853.0	853.0	849.8	851.2
15°	854.4	854.9	853.5	851.6	850.7	848.4	847.5	845.7	843.8	841.5	842.0
17.5°	851.2	849.8	847.9	846.1	842.4	840.6	838.7	835.9	835.0	832.3	831.3
20°	841.5	840.6	838.3	835.0	832.8	828.6	826.7	824.0	821.7	819.0	817.5
22.5°	829.1	828.2	825.4	822.1	818.4	816.6	814.9	809.7	807.5	804.7	804.2
25°	813.4	812.1	809.2	805.6	803.8	798.7	796.8	793.2	792.2	789.5	789.1
27.5°	789.5	787.6	784.5	779.8	776.6	773.4	771.6	768.8	767.9	765.1	764.6
30°	753.5	751.3	744.8	743.0	737.5	734.3	734.3	730.6	731.0	729.2	729.2
32.5°	696.9	693.2	688.2	684.5	680.9	679.0	679.0	677.6	678.5	678.5	679.4
35°	621.9	616.9	614.1	611.8	611.8	613.6	619.1	620.6	623.3	625.6	627.4
37.5°	525.7	525.3	528.4	531.2	538.2	545.9	555.7	564.0	571.7	577.3	582.8
40°	421.7	433.2	442.3	455.2	465.9	481.0	498.5	512.9	526.2	535.8	545.9
42.5°	329.1	343.9	363.2	382.0	401.0	421.7	444.7	464.5	482.0	495.4	505.9
45°	256.4	276.7	300.2	324.1	348.5	374.3	398.2	418.5	436.9	450.6	461.3
47.5°	206.7	228.8	255.5	281.7	309.4	336.5	363.2	380.7	395.9	406.9	416.6
50°	170.7	194.3	222.3	252.2	279.9	307.0	330.0	347.1	359.5	369.1	375.2
52.5°	142.7	167.6	197.5	227.5	255.0	279.9	300.7	313.5	323.6	330.5	336.1
55°	117.8	141.8	169.8	198.0	225.1	248.6	265.6	275.3	283.1	287.2	290.5
57.5°	96.2	118.3	144.0	169.8	193.4	212.7	226.0	235.7	239.3	242.6	242.1
60°	75.6	96.2	119.7	141.8	162.1	177.7	187.3	192.9	195.6	197.1	196.1
62.5°	59.4	78.2	96.2	115.6	130.3	143.6	152.8	152.8	154.2	154.7	156.0
65°	44.2	58.4	74.1	88.3	100.3	109.1	114.1	115.6	117.4	116.9	116.0
67.5°	32.7	43.3	54.8	65.4	73.6	79.1	82.8	86.1	85.6	84.7	84.2
70°	22.5	29.5	39.6	46.1	52.0	57.5	58.4	59.0	59.4	59.9	59.0
72.5°	15.7	20.7	26.2	31.7	35.4	37.8	40.0	40.5	40.5	40.5	40.0
75°	7.8	10.5	15.7	17.9	21.2	22.1	24.0	24.0	25.3	23.4	23.0
77.5°	7.0	8.3	11.1	12.9	14.2	15.7	16.1	17.5	17.0	16.1	16.6
80°	4.1	5.0	7.0	7.8	9.6	10.1	10.5	11.1	10.5	11.1	11.1
82.5°	3.3	3.7	4.6	4.6	5.9	5.9	6.4	6.4	7.0	7.0	7.0
85°	1.8	3.3	2.8	5.5	3.7	3.7	4.6	5.5	4.6	4.6	5.5
87.5°	1.8	1.8	1.3	1.8	1.8	1.8	2.2	2.8	2.8	3.3	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	857.6	857.6	857.6	857.6
2.5°	859.0	859.9	858.6	858.1
5°	860.4	860.4	859.5	859.5
7.5°	860.4	860.4	859.0	858.1
10°	856.7	856.7	855.3	854.4
12.5°	849.8	849.8	849.4	847.9
15°	841.1	841.1	839.2	837.8
17.5°	829.1	830.0	827.7	827.7
20°	816.2	815.8	813.8	812.9
22.5°	802.9	802.0	801.4	798.7
25°	788.6	787.6	786.3	784.9
27.5°	764.2	763.7	762.3	760.5
30°	726.9	726.4	724.6	724.6
32.5°	678.5	678.1	676.3	676.7
35°	628.3	630.2	629.3	627.4
37.5°	586.5	587.9	588.7	587.9
40°	551.5	555.7	556.1	557.0
42.5°	514.2	519.7	521.6	522.5
45°	469.6	474.6	478.8	477.9
47.5°	424.0	427.7	431.4	428.6
50°	380.2	382.6	383.9	383.9
52.5°	338.8	338.8	338.3	338.8
55°	291.3	291.3	289.6	290.5
57.5°	241.7	242.6	241.2	238.9
60°	195.6	193.4	192.5	191.0
62.5°	152.3	152.3	149.2	153.2
65°	114.1	112.8	111.4	111.0
67.5°	82.8	82.4	81.0	80.6
70°	58.4	56.6	56.2	55.3
72.5°	39.1	39.1	38.2	38.2
75°	24.0	21.6	21.2	21.6
77.5°	16.6	16.1	16.1	15.7
80°	11.1	10.5	11.5	10.1
82.5°	7.0	7.4	7.0	7.4
85°	4.6	5.5	5.0	5.0
87.5°	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0

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