

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: P246098

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246098
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 EC8B209730 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1602.0 lumens
Efficiency: N/A
Efficacy: 75.2 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

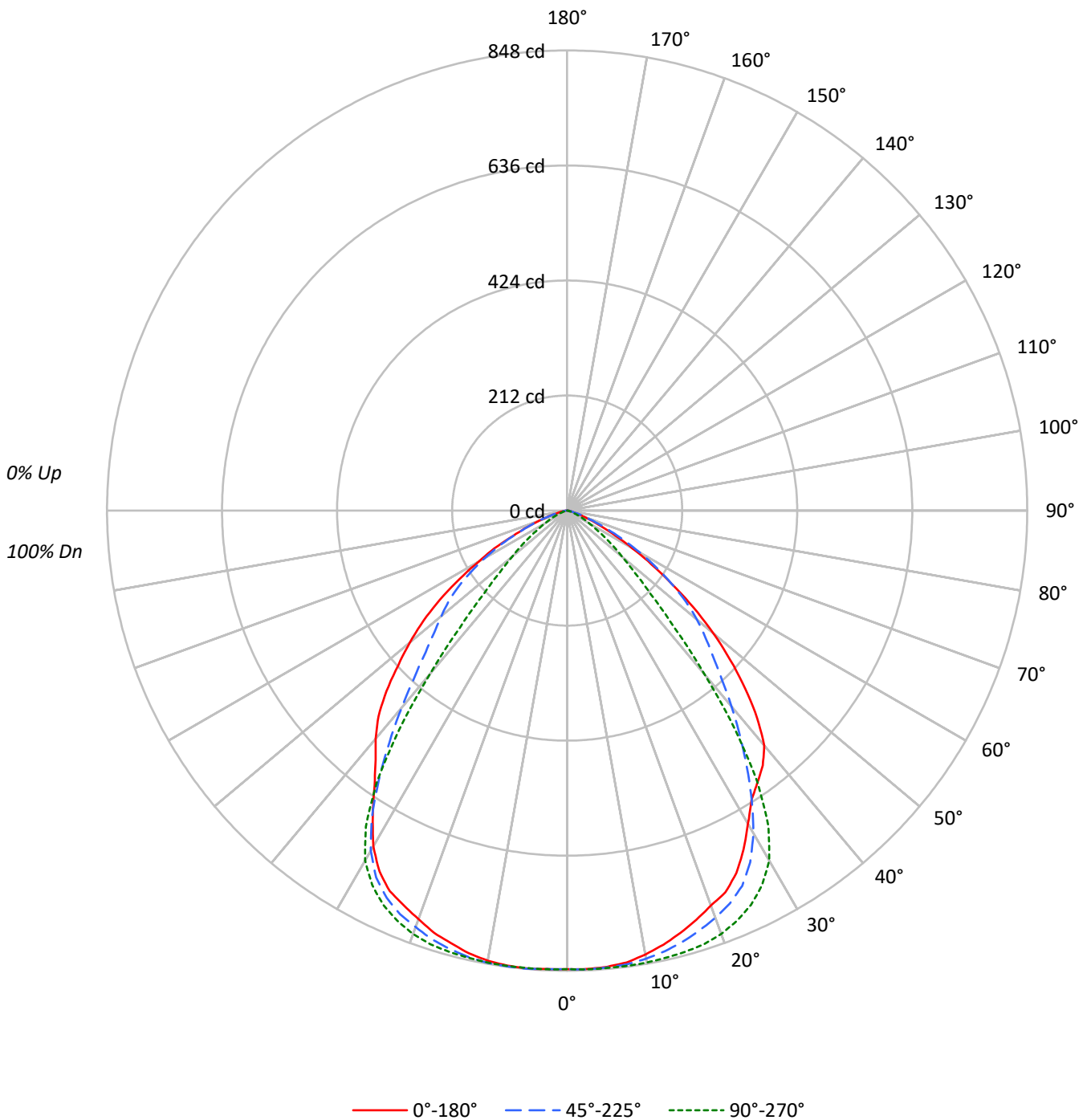
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	51	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°	80.7	5.0
10°-20°	234.3	14.6
20°-30°	355.6	22.2
30°-40°	373.5	23.3
40°-50°	280.0	17.5
50°-60°	179.6	11.2
60°-70°	76.9	4.8
70°-80°	18.2	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°	670.5	41.9
0°-40°	1044.0	65.2
0°-60°	1503.6	93.9
0°-90°	1602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1602.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	845	845	845	845	845	
5°	844	845	846	848	847	80
15°	806	823	842	836	826	227
25°	737	763	802	787	774	337
35°	612	578	612	605	618	384
45°	465	380	218	369	471	356
55°	235	235	81	245	286	213
65°	71	84	26	108	109	76
75°	11	13	4	22	21	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°	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2
2.5°	845.7	846.6	846.2	846.2	845.7	846.2	846.2	847.1	847.1	846.2	845.7
5°	843.9	844.8	844.8	843.9	843.9	846.2	844.8	845.7	845.7	845.2	845.2
7.5°	839.8	839.8	841.6	840.3	840.3	841.6	841.2	842.1	843.0	843.4	843.4
10°	830.7	831.6	832.1	832.1	832.5	833.9	834.8	836.6	837.5	838.4	838.9
12.5°	819.4	820.7	821.2	820.7	822.1	823.9	826.2	828.5	829.8	831.6	833.0
15°	805.8	805.8	806.7	808.0	809.0	811.7	813.9	816.7	820.3	822.6	824.8
17.5°	790.8	791.7	793.1	793.1	794.9	799.4	800.8	804.9	809.0	811.2	815.8
20°	774.5	775.4	776.7	777.7	779.9	783.5	786.3	789.9	794.4	798.5	803.1
22.5°	761.8	760.0	760.9	761.8	764.0	767.2	770.4	774.9	779.5	783.5	788.1
25°	737.3	737.7	739.1	740.0	742.7	745.4	749.1	754.5	758.6	763.1	768.1
27.5°	704.1	704.6	706.9	706.9	709.1	713.7	715.9	720.5	725.9	730.5	736.4
30°	666.5	667.4	667.4	669.2	670.6	672.8	675.1	679.6	682.4	686.5	694.6
32.5°	632.0	632.9	632.5	632.0	630.6	630.2	629.7	630.6	631.6	632.9	636.1
35°	611.6	609.3	607.5	604.3	600.7	596.2	592.1	586.6	581.6	577.6	573.0
37.5°	592.1	591.6	588.9	584.4	577.1	568.9	559.4	547.6	535.8	523.1	510.9
40°	564.9	563.5	561.2	554.9	546.7	536.7	524.0	509.5	490.4	470.9	451.0
42.5°	518.6	519.0	516.3	511.3	503.6	494.1	480.9	465.0	444.6	421.5	395.6
45°	464.6	464.6	463.7	459.6	454.2	446.4	436.5	423.3	403.3	379.7	352.1
47.5°	408.3	408.8	407.4	406.5	404.2	399.3	392.0	382.0	368.0	345.3	317.6
50°	351.2	351.2	353.4	353.0	353.0	351.2	348.0	342.1	329.8	311.7	285.8
52.5°	294.0	294.9	296.3	298.1	300.3	304.0	300.3	297.6	289.9	275.8	253.6
55°	235.0	235.9	238.2	241.4	244.1	247.7	248.6	248.6	244.5	235.0	218.2
57.5°	184.7	183.3	185.1	187.8	191.5	195.1	197.8	201.0	200.5	194.2	180.6
60°	138.8	139.3	140.6	143.4	146.1	149.3	152.9	155.6	157.0	153.8	145.2
62.5°	101.2	101.2	103.0	105.7	107.1	111.6	113.9	115.2	116.6	116.1	110.7
65°	70.8	71.7	72.6	74.0	75.3	78.0	79.4	82.1	83.0	83.5	79.4
67.5°	49.9	48.5	49.5	50.4	51.7	53.5	56.3	56.3	57.6	57.6	54.9
70°	31.8	31.8	32.2	33.6	34.5	34.9	35.8	36.7	38.1	37.7	37.7
72.5°	21.3	20.9	21.3	21.8	22.2	23.6	23.6	24.0	25.0	25.4	23.6
75°	10.9	11.3	12.2	11.8	13.2	12.2	12.7	14.1	13.6	12.7	12.7
77.5°	9.1	9.1	9.1	8.6	9.5	9.5	9.1	10.0	9.5	9.5	9.1
80°	6.4	6.8	6.4	5.9	6.4	5.9	5.9	5.9	5.9	5.9	5.4
82.5°	5.0	4.1	4.5	4.1	4.5	4.5	4.1	3.6	3.6	4.1	3.6
85°	3.6	2.7	3.2	3.2	2.7	2.7	2.7	2.7	2.7	2.3	2.3
87.5°	2.3	1.4	1.4	1.4	1.8	1.8	1.8	1.4	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°	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2
2.5°	846.6	846.2	847.1	846.6	846.6	846.2	846.6	846.2	847.1	845.2	845.7
5°	846.6	845.7	846.2	846.6	847.1	846.2	846.2	846.2	847.1	846.2	846.6
7.5°	844.8	844.3	845.7	846.6	846.2	845.7	846.6	846.2	847.1	846.6	847.5
10°	841.2	841.6	842.5	843.9	844.3	844.8	845.7	845.7	847.1	845.2	846.2
12.5°	835.7	837.5	839.8	840.7	842.5	842.5	843.4	843.9	844.8	844.3	845.7
15°	828.9	831.2	833.9	836.2	838.4	839.8	841.2	841.6	843.0	841.6	842.1
17.5°	820.7	823.5	827.6	830.3	833.9	835.3	837.1	838.0	839.4	838.4	838.9
20°	809.4	812.6	817.1	821.2	823.5	826.6	828.9	830.3	831.2	830.3	830.7
22.5°	793.5	798.1	804.0	807.1	811.7	814.4	814.9	818.0	820.3	818.0	818.9
25°	774.9	779.5	784.0	790.8	794.9	798.1	801.2	801.7	804.0	803.5	803.1
27.5°	744.1	750.0	757.7	763.1	768.6	773.6	777.2	778.1	780.4	779.5	779.9
30°	701.9	708.2	715.5	724.1	731.8	736.8	741.3	744.5	746.8	745.4	745.0
32.5°	642.0	648.3	656.1	664.7	673.8	681.0	686.5	690.5	693.3	692.3	690.1
35°	573.5	575.3	580.3	587.1	594.8	602.5	607.5	612.0	615.2	616.1	616.1
37.5°	503.2	497.3	493.6	493.6	498.2	501.3	505.9	508.6	513.6	515.4	516.8
40°	435.1	421.5	408.8	399.3	392.9	392.5	392.5	393.8	398.4	404.2	409.7
42.5°	374.3	352.5	333.0	315.3	302.6	295.4	292.2	292.6	296.3	301.7	310.8
45°	325.8	298.5	274.0	252.7	235.5	224.1	218.7	218.2	221.0	227.3	237.3
47.5°	288.1	259.1	231.4	206.9	188.3	176.0	169.7	167.9	169.7	175.6	187.4
50°	256.8	226.9	198.3	172.9	152.9	140.2	134.3	132.0	134.3	139.3	151.1
52.5°	227.8	196.9	170.1	145.6	124.3	113.4	107.1	105.7	107.1	113.0	122.5
55°	194.2	167.9	141.6	117.1	98.5	87.6	82.6	81.2	82.6	88.0	98.0
57.5°	161.1	138.4	115.2	93.0	77.1	67.6	63.1	61.2	64.4	68.1	79.9
60°	130.2	112.1	92.6	73.0	59.9	51.3	47.6	47.2	48.1	52.6	60.8
62.5°	102.1	87.1	71.7	55.8	44.9	41.3	36.7	36.3	37.2	39.9	46.3
65°	73.5	64.0	52.2	40.8	32.2	27.2	25.4	25.9	26.8	28.6	34.5
67.5°	51.3	44.5	36.3	28.6	22.2	20.0	18.2	17.7	18.2	21.3	24.5
70°	34.5	30.4	24.5	21.8	15.4	12.2	12.7	11.3	13.2	13.2	15.9
72.5°	22.7	20.0	16.3	12.7	10.9	8.6	8.6	8.2	9.1	9.5	11.8
75°	11.8	9.1	9.1	6.4	4.5	2.3	4.1	3.6	3.2	3.6	4.5
77.5°	8.2	6.8	6.4	5.0	4.5	3.6	3.6	3.6	3.6	4.1	4.5
80°	5.0	5.0	3.6	3.2	2.7	2.3	2.7	2.7	2.7	2.7	3.2
82.5°	3.2	2.7	2.7	2.3	2.3	1.8	1.8	1.8	1.8	1.8	2.7
85°	2.7	1.8	1.8	1.4	1.8	3.2	1.4	1.8	1.8	1.8	1.4
87.5°	0.9	1.4	1.4	1.4	0.9	0.5	0.9	1.4	1.4	2.3	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°	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2
2.5°	846.6	847.1	847.1	846.6	846.6	845.7	847.5	846.2	846.6	848.4	847.1
5°	847.5	848.0	848.0	847.5	847.5	847.5	848.0	848.0	847.5	847.1	848.0
7.5°	849.3	848.9	848.9	848.0	848.0	847.1	848.0	846.6	847.5	846.6	848.0
10°	847.1	847.5	847.1	846.6	846.6	846.2	846.2	844.8	845.2	843.9	844.8
12.5°	845.7	845.2	845.2	844.3	843.4	842.5	842.1	840.7	840.7	837.5	838.9
15°	842.1	842.5	841.2	839.4	838.4	836.2	835.3	833.4	831.6	829.4	829.8
17.5°	838.9	837.5	835.7	833.9	830.3	828.5	826.6	823.9	823.0	820.3	819.4
20°	829.4	828.5	826.2	823.0	820.7	816.7	814.9	812.1	809.9	807.1	805.8
22.5°	817.1	816.2	813.5	810.3	806.7	804.9	803.1	798.1	795.8	793.1	792.6
25°	801.7	800.3	797.6	794.0	792.2	787.2	785.4	781.7	780.8	778.1	777.7
27.5°	778.1	776.3	773.1	768.6	765.4	762.2	760.4	757.7	756.8	754.0	753.6
30°	742.7	740.4	734.1	732.3	726.8	723.7	723.7	720.0	720.5	718.7	718.7
32.5°	686.9	683.3	678.3	674.7	671.0	669.2	669.2	667.8	668.8	668.8	669.7
35°	613.0	608.0	605.2	603.0	603.0	604.8	610.2	611.6	614.3	616.6	618.4
37.5°	518.1	517.7	520.9	523.6	530.4	538.1	547.6	555.8	563.5	568.9	574.4
40°	415.6	426.9	436.0	448.7	459.1	474.1	491.4	505.4	518.6	528.1	538.1
42.5°	324.4	338.9	358.0	376.6	395.2	415.6	438.3	457.8	475.0	488.2	498.6
45°	252.7	272.7	295.8	319.4	343.5	368.9	392.5	412.4	430.6	444.2	454.6
47.5°	203.7	225.5	251.8	277.7	304.9	331.7	358.0	375.2	390.2	401.1	410.6
50°	168.3	191.5	219.1	248.6	275.8	302.6	325.3	342.1	354.3	363.9	369.8
52.5°	140.6	165.1	194.6	224.1	251.3	275.8	296.3	309.0	319.0	325.8	331.2
55°	116.1	139.7	167.4	195.1	221.9	245.0	261.8	271.3	279.0	283.1	286.3
57.5°	94.8	116.6	142.0	167.4	190.6	209.6	222.8	232.3	235.9	239.1	238.6
60°	74.4	94.8	118.0	139.7	159.7	175.1	184.7	190.1	192.8	194.2	193.3
62.5°	58.5	77.1	94.8	113.9	128.4	141.6	150.6	150.6	152.0	152.4	153.8
65°	43.6	57.6	73.0	87.1	98.9	107.5	112.5	113.9	115.7	115.2	114.3
67.5°	32.2	42.7	54.0	64.4	72.6	78.0	81.7	84.8	84.4	83.5	83.0
70°	22.2	29.0	39.0	45.4	51.3	56.7	57.6	58.1	58.5	59.0	58.1
72.5°	15.4	20.4	25.9	31.3	34.9	37.2	39.5	39.9	39.9	39.9	39.5
75°	7.7	10.4	15.4	17.7	20.9	21.8	23.6	23.6	25.0	23.1	22.7
77.5°	6.8	8.2	10.9	12.7	14.1	15.4	15.9	17.2	16.8	15.9	16.3
80°	4.1	5.0	6.8	7.7	9.5	10.0	10.4	10.9	10.4	10.9	10.9
82.5°	3.2	3.6	4.5	4.5	5.9	5.9	6.4	6.4	6.8	6.8	6.8
85°	1.8	3.2	2.7	5.4	3.6	3.6	4.5	5.4	4.5	4.5	5.4
87.5°	1.8	1.8	1.4	1.8	1.8	1.8	2.3	2.7	2.7	3.2	2.7
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°	845.2	845.2	845.2	845.2
2.5°	846.6	847.5	846.2	845.7
5°	848.0	848.0	847.1	847.1
7.5°	848.0	848.0	846.6	845.7
10°	844.3	844.3	843.0	842.1
12.5°	837.5	837.5	837.1	835.7
15°	828.9	828.9	827.1	825.7
17.5°	817.1	818.0	815.8	815.8
20°	804.4	804.0	802.2	801.2
22.5°	791.3	790.4	789.9	787.2
25°	777.2	776.3	774.9	773.6
27.5°	753.1	752.7	751.3	749.5
30°	716.4	715.9	714.1	714.1
32.5°	668.8	668.3	666.5	666.9
35°	619.3	621.1	620.2	618.4
37.5°	578.0	579.4	580.3	579.4
40°	543.5	547.6	548.1	549.0
42.5°	506.8	512.2	514.0	514.9
45°	462.8	467.8	471.9	470.9
47.5°	417.9	421.5	425.1	422.4
50°	374.8	377.0	378.4	378.4
52.5°	333.9	333.9	333.5	333.9
55°	287.2	287.2	285.4	286.3
57.5°	238.2	239.1	237.7	235.5
60°	192.8	190.6	189.6	188.3
62.5°	150.2	150.2	147.0	151.1
65°	112.5	111.2	109.8	109.3
67.5°	81.7	81.2	79.9	79.4
70°	57.6	55.8	55.4	54.4
72.5°	38.6	38.6	37.7	37.7
75°	23.6	21.3	20.9	21.3
77.5°	16.3	15.9	15.9	15.4
80°	10.9	10.4	11.3	10.0
82.5°	6.8	7.3	6.8	7.3
85°	4.5	5.4	5.0	5.0
87.5°	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0

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