

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: P246164

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246164
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 EC8B209727 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1371.0 lumens
Efficiency: N/A
Efficacy: 64.4 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

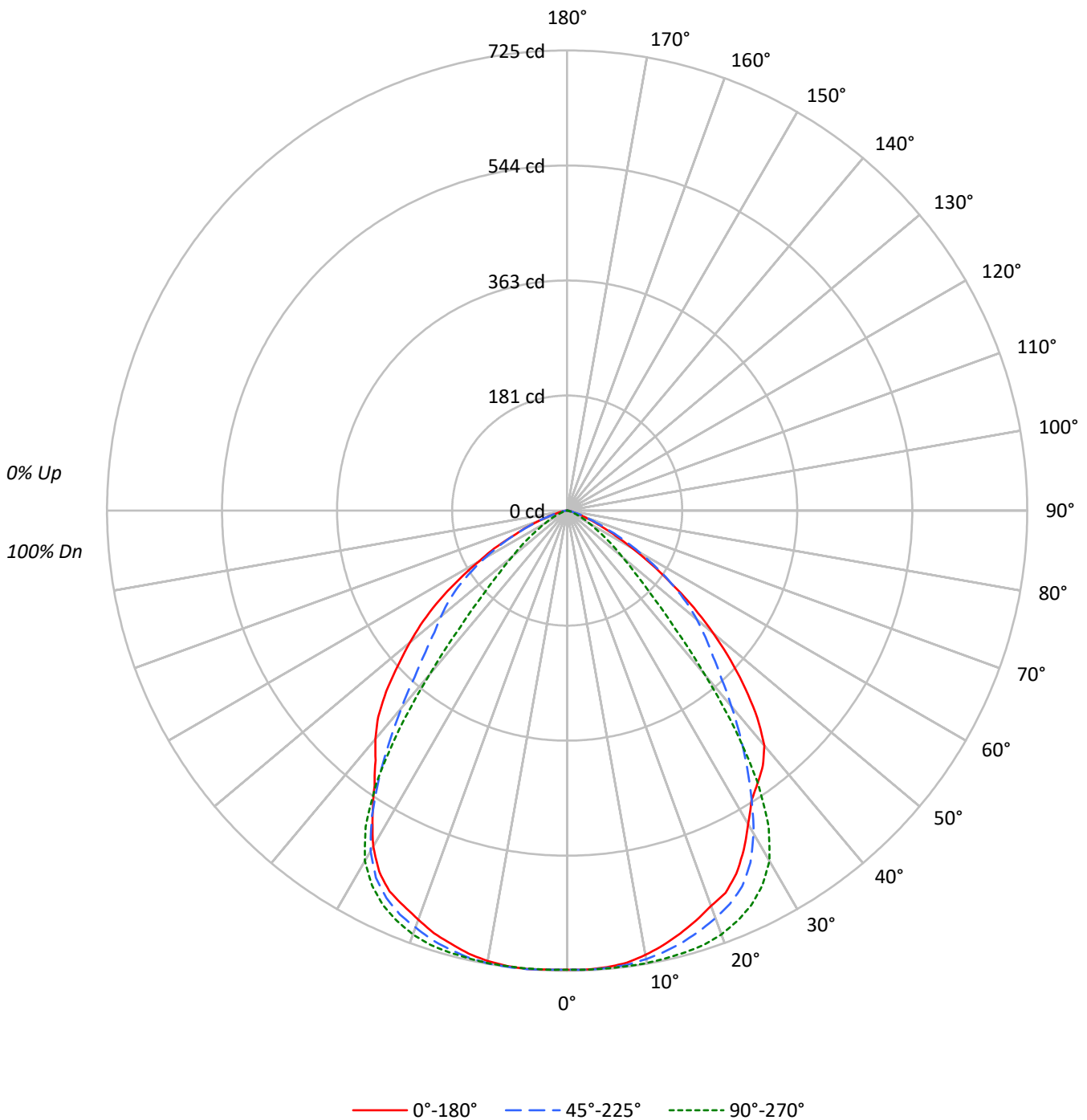
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	69.0	5.0
10°-20°	200.5	14.6
20°-30°	304.3	22.2
30°-40°	319.6	23.3
40°-50°	239.6	17.5
50°-60°	153.7	11.2
60°-70°	65.8	4.8
70°-80°	15.5	1.1
80°-90°	2.9	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°	573.8	41.9
0°-40°	893.4	65.2
0°-60°	1286.8	93.9
0°-90°	1371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1371.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	723	723	723	723	723	
5°	722	723	724	725	725	69
15°	690	704	720	716	707	195
25°	631	653	686	674	662	288
35°	523	494	524	518	529	329
45°	398	325	187	316	403	305
55°	201	201	70	210	245	182
65°	61	71	22	92	94	65
75°	9	11	3	19	18	14
85°	3	2	2	3	4	3
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°	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4
2.5°	723.8	724.5	724.1	724.1	723.8	724.1	724.1	724.9	724.9	724.1	723.8
5°	722.2	723.0	723.0	722.2	722.2	724.1	723.0	723.8	723.8	723.4	723.4
7.5°	718.7	718.7	720.3	719.1	719.1	720.3	719.9	720.6	721.4	721.8	721.8
10°	710.9	711.7	712.1	712.1	712.5	713.7	714.4	716.0	716.8	717.5	717.9
12.5°	701.2	702.4	702.8	702.4	703.6	705.1	707.1	709.0	710.2	711.7	712.9
15°	689.6	689.6	690.4	691.5	692.3	694.6	696.6	698.9	702.0	704.0	705.9
17.5°	676.8	677.6	678.7	678.7	680.3	684.1	685.3	688.8	692.3	694.2	698.1
20°	662.8	663.6	664.7	665.5	667.5	670.6	672.9	676.0	679.9	683.4	687.3
22.5°	651.9	650.4	651.1	651.9	653.9	656.6	659.3	663.2	667.1	670.6	674.4
25°	631.0	631.3	632.5	633.3	635.6	637.9	641.1	645.7	649.2	653.1	657.4
27.5°	602.6	603.0	604.9	604.9	606.9	610.8	612.7	616.6	621.3	625.1	630.2
30°	570.4	571.2	571.2	572.7	573.9	575.8	577.8	581.6	584.0	587.5	594.5
32.5°	540.9	541.6	541.3	540.9	539.7	539.3	538.9	539.7	540.5	541.6	544.4
35°	523.4	521.5	519.9	517.2	514.1	510.2	506.7	502.0	497.8	494.3	490.4
37.5°	506.7	506.3	504.0	500.1	493.9	486.9	478.8	468.7	458.6	447.7	437.2
40°	483.4	482.2	480.3	474.9	467.9	459.3	448.5	436.0	419.7	403.0	386.0
42.5°	443.8	444.2	441.9	437.6	431.0	422.8	411.6	398.0	380.5	360.7	338.6
45°	397.6	397.6	396.8	393.3	388.7	382.1	373.5	362.3	345.2	325.0	301.3
47.5°	349.5	349.8	348.7	347.9	346.0	341.7	335.5	326.9	314.9	295.5	271.8
50°	300.5	300.5	302.5	302.1	302.1	300.5	297.8	292.8	282.3	266.7	244.6
52.5°	251.6	252.4	253.6	255.1	257.0	260.1	257.0	254.7	248.1	236.1	217.1
55°	201.1	201.9	203.8	206.6	208.9	212.0	212.8	212.8	209.3	201.1	186.8
57.5°	158.0	156.9	158.4	160.8	163.9	167.0	169.3	172.0	171.6	166.2	154.5
60°	118.8	119.2	120.4	122.7	125.0	127.7	130.9	133.2	134.3	131.6	124.2
62.5°	86.6	86.6	88.1	90.5	91.6	95.5	97.5	98.6	99.8	99.4	94.7
65°	60.6	61.3	62.1	63.3	64.5	66.8	67.9	70.3	71.1	71.4	67.9
67.5°	42.7	41.5	42.3	43.1	44.3	45.8	48.1	48.1	49.3	49.3	47.0
70°	27.2	27.2	27.6	28.7	29.5	29.9	30.7	31.4	32.6	32.2	32.2
72.5°	18.3	17.9	18.3	18.6	19.0	20.2	20.2	20.6	21.4	21.7	20.2
75°	9.3	9.7	10.5	10.1	11.3	10.5	10.9	12.0	11.6	10.9	10.9
77.5°	7.8	7.8	7.8	7.4	8.2	8.2	7.8	8.5	8.2	8.2	7.8
80°	5.4	5.8	5.4	5.0	5.4	5.0	5.0	5.0	5.0	5.0	4.7
82.5°	4.3	3.5	3.9	3.5	3.9	3.9	3.5	3.1	3.1	3.5	3.1
85°	3.1	2.3	2.7	2.7	2.3	2.3	2.3	2.3	2.3	1.9	1.9
87.5°	1.9	1.2	1.2	1.2	1.5	1.5	1.5	1.2	1.5	1.5	0.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4
2.5°	724.5	724.1	724.9	724.5	724.5	724.1	724.5	724.1	724.9	723.4	723.8
5°	724.5	723.8	724.1	724.5	724.9	724.1	724.1	724.1	724.9	724.1	724.5
7.5°	723.0	722.6	723.8	724.5	724.1	723.8	724.5	724.1	724.9	724.5	725.3
10°	719.9	720.3	721.0	722.2	722.6	723.0	723.8	723.8	724.9	723.4	724.1
12.5°	715.2	716.8	718.7	719.5	721.0	721.0	721.8	722.2	723.0	722.6	723.8
15°	709.4	711.3	713.7	715.6	717.5	718.7	719.9	720.3	721.4	720.3	720.6
17.5°	702.4	704.7	708.2	710.6	713.7	714.8	716.4	717.2	718.3	717.5	717.9
20°	692.7	695.4	699.3	702.8	704.7	707.4	709.4	710.6	711.3	710.6	710.9
22.5°	679.1	683.0	688.0	690.8	694.6	697.0	697.4	700.1	702.0	700.1	700.8
25°	663.2	667.1	671.0	676.8	680.3	683.0	685.7	686.1	688.0	687.6	687.3
27.5°	636.8	641.8	648.4	653.1	657.7	662.0	665.1	665.9	667.8	667.1	667.5
30°	600.7	606.1	612.3	619.7	626.3	630.6	634.5	637.2	639.1	637.9	637.6
32.5°	549.4	554.9	561.5	568.8	576.6	582.8	587.5	591.0	593.3	592.5	590.6
35°	490.8	492.3	496.6	502.4	509.0	515.6	519.9	523.8	526.5	527.3	527.3
37.5°	430.6	425.6	422.5	422.5	426.3	429.0	432.9	435.3	439.5	441.1	442.3
40°	372.4	360.7	349.8	341.7	336.3	335.9	335.9	337.0	340.9	346.0	350.6
42.5°	320.3	301.7	285.0	269.9	259.0	252.8	250.1	250.4	253.6	258.2	266.0
45°	278.8	255.5	234.5	216.3	201.5	191.8	187.2	186.8	189.1	194.5	203.1
47.5°	246.6	221.7	198.0	177.1	161.1	150.7	145.2	143.7	145.2	150.3	160.4
50°	219.8	194.1	169.7	147.9	130.9	120.0	114.9	113.0	114.9	119.2	129.3
52.5°	194.9	168.5	145.6	124.6	106.4	97.1	91.6	90.5	91.6	96.7	104.8
55°	166.2	143.7	121.1	100.2	84.3	74.9	70.7	69.5	70.7	75.3	83.9
57.5°	137.8	118.4	98.6	79.6	66.0	57.8	54.0	52.4	55.1	58.2	68.3
60°	111.4	95.9	79.2	62.5	51.3	43.9	40.8	40.4	41.2	45.0	52.0
62.5°	87.4	74.6	61.3	47.8	38.4	35.3	31.4	31.1	31.8	34.2	39.6
65°	62.9	54.8	44.7	34.9	27.6	23.3	21.7	22.1	22.9	24.5	29.5
67.5°	43.9	38.0	31.1	24.5	19.0	17.1	15.5	15.1	15.5	18.3	21.0
70°	29.5	26.0	21.0	18.6	13.2	10.5	10.9	9.7	11.3	11.3	13.6
72.5°	19.4	17.1	14.0	10.9	9.3	7.4	7.4	7.0	7.8	8.2	10.1
75°	10.1	7.8	7.8	5.4	3.9	1.9	3.5	3.1	2.7	3.1	3.9
77.5°	7.0	5.8	5.4	4.3	3.9	3.1	3.1	3.1	3.1	3.5	3.9
80°	4.3	4.3	3.1	2.7	2.3	1.9	2.3	2.3	2.3	2.3	2.7
82.5°	2.7	2.3	2.3	1.9	1.9	1.5	1.5	1.5	1.5	1.5	2.3
85°	2.3	1.5	1.5	1.2	1.5	2.7	1.2	1.5	1.5	1.5	1.2
87.5°	0.8	1.2	1.2	1.2	0.8	0.4	0.8	1.2	1.2	1.9	1.5
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°	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4	723.4
2.5°	724.5	724.9	724.9	724.5	724.5	723.8	725.3	724.1	724.5	726.1	724.9
5°	725.3	725.7	725.7	725.3	725.3	725.3	725.7	725.7	725.3	724.9	725.7
7.5°	726.9	726.5	726.5	725.7	725.7	724.9	725.7	724.5	725.3	724.5	725.7
10°	724.9	725.3	724.9	724.5	724.5	724.1	724.1	723.0	723.4	722.2	723.0
12.5°	723.8	723.4	723.4	722.6	721.8	721.0	720.6	719.5	719.5	716.8	717.9
15°	720.6	721.0	719.9	718.3	717.5	715.6	714.8	713.3	711.7	709.8	710.2
17.5°	717.9	716.8	715.2	713.7	710.6	709.0	707.4	705.1	704.3	702.0	701.2
20°	709.8	709.0	707.1	704.3	702.4	698.9	697.4	695.0	693.1	690.8	689.6
22.5°	699.3	698.5	696.2	693.5	690.4	688.8	687.3	683.0	681.0	678.7	678.3
25°	686.1	684.9	682.6	679.5	677.9	673.7	672.1	669.0	668.2	665.9	665.5
27.5°	665.9	664.3	661.6	657.7	655.0	652.3	650.8	648.4	647.7	645.3	644.9
30°	635.6	633.7	628.2	626.7	622.0	619.3	619.3	616.2	616.6	615.0	615.0
32.5°	587.9	584.8	580.5	577.4	574.3	572.7	572.7	571.5	572.3	572.3	573.1
35°	524.6	520.3	518.0	516.0	516.0	517.6	522.2	523.4	525.7	527.7	529.2
37.5°	443.4	443.0	445.7	448.1	453.9	460.5	468.7	475.6	482.2	486.9	491.6
40°	355.7	365.4	373.1	384.0	392.9	405.8	420.5	432.5	443.8	452.0	460.5
42.5°	277.6	290.0	306.4	322.3	338.2	355.7	375.1	391.8	406.5	417.8	426.7
45°	216.3	233.4	253.2	273.4	293.9	315.7	335.9	352.9	368.5	380.1	389.1
47.5°	174.3	193.0	215.5	237.6	260.9	283.8	306.4	321.1	333.9	343.2	351.4
50°	144.0	163.9	187.5	212.8	236.1	259.0	278.4	292.8	303.2	311.4	316.4
52.5°	120.4	141.3	166.6	191.8	215.1	236.1	253.6	264.4	273.0	278.8	283.4
55°	99.4	119.6	143.3	167.0	189.9	209.7	224.0	232.2	238.8	242.3	245.0
57.5°	81.2	99.8	121.5	143.3	163.1	179.4	190.6	198.8	201.9	204.6	204.2
60°	63.7	81.2	101.0	119.6	136.7	149.9	158.0	162.7	165.0	166.2	165.4
62.5°	50.1	66.0	81.2	97.5	109.9	121.1	128.9	128.9	130.1	130.5	131.6
65°	37.3	49.3	62.5	74.6	84.6	92.0	96.3	97.5	99.0	98.6	97.8
67.5°	27.6	36.5	46.2	55.1	62.1	66.8	69.9	72.6	72.2	71.4	71.1
70°	19.0	24.9	33.4	38.8	43.9	48.5	49.3	49.7	50.1	50.5	49.7
72.5°	13.2	17.5	22.1	26.8	29.9	31.8	33.8	34.2	34.2	34.2	33.8
75°	6.6	8.9	13.2	15.1	17.9	18.6	20.2	20.2	21.4	19.8	19.4
77.5°	5.8	7.0	9.3	10.9	12.0	13.2	13.6	14.8	14.4	13.6	14.0
80°	3.5	4.3	5.8	6.6	8.2	8.5	8.9	9.3	8.9	9.3	9.3
82.5°	2.7	3.1	3.9	3.9	5.0	5.0	5.4	5.4	5.8	5.8	5.8
85°	1.5	2.7	2.3	4.7	3.1	3.1	3.9	4.7	3.9	3.9	4.7
87.5°	1.5	1.5	1.2	1.5	1.5	1.5	1.9	2.3	2.3	2.7	2.3
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°	723.4	723.4	723.4	723.4
2.5°	724.5	725.3	724.1	723.8
5°	725.7	725.7	724.9	724.9
7.5°	725.7	725.7	724.5	723.8
10°	722.6	722.6	721.4	720.6
12.5°	716.8	716.8	716.4	715.2
15°	709.4	709.4	707.8	706.7
17.5°	699.3	700.1	698.1	698.1
20°	688.4	688.0	686.5	685.7
22.5°	677.2	676.4	676.0	673.7
25°	665.1	664.3	663.2	662.0
27.5°	644.5	644.2	643.0	641.4
30°	613.1	612.7	611.2	611.2
32.5°	572.3	571.9	570.4	570.8
35°	530.0	531.6	530.8	529.2
37.5°	494.7	495.8	496.6	495.8
40°	465.2	468.7	469.0	469.8
42.5°	433.7	438.4	439.9	440.7
45°	396.0	400.3	403.8	403.0
47.5°	357.6	360.7	363.8	361.5
50°	320.7	322.7	323.8	323.8
52.5°	285.8	285.8	285.4	285.8
55°	245.8	245.8	244.2	245.0
57.5°	203.8	204.6	203.5	201.5
60°	165.0	163.1	162.3	161.1
62.5°	128.5	128.5	125.8	129.3
65°	96.3	95.1	94.0	93.6
67.5°	69.9	69.5	68.3	67.9
70°	49.3	47.8	47.4	46.6
72.5°	33.0	33.0	32.2	32.2
75°	20.2	18.3	17.9	18.3
77.5°	14.0	13.6	13.6	13.2
80°	9.3	8.9	9.7	8.5
82.5°	5.8	6.2	5.8	6.2
85°	3.9	4.7	4.3	4.3
87.5°	2.3	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0

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