

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: P245516

Luminaire Tested: **LSR8B20D010 EC8B20927 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20927 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1756.1 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

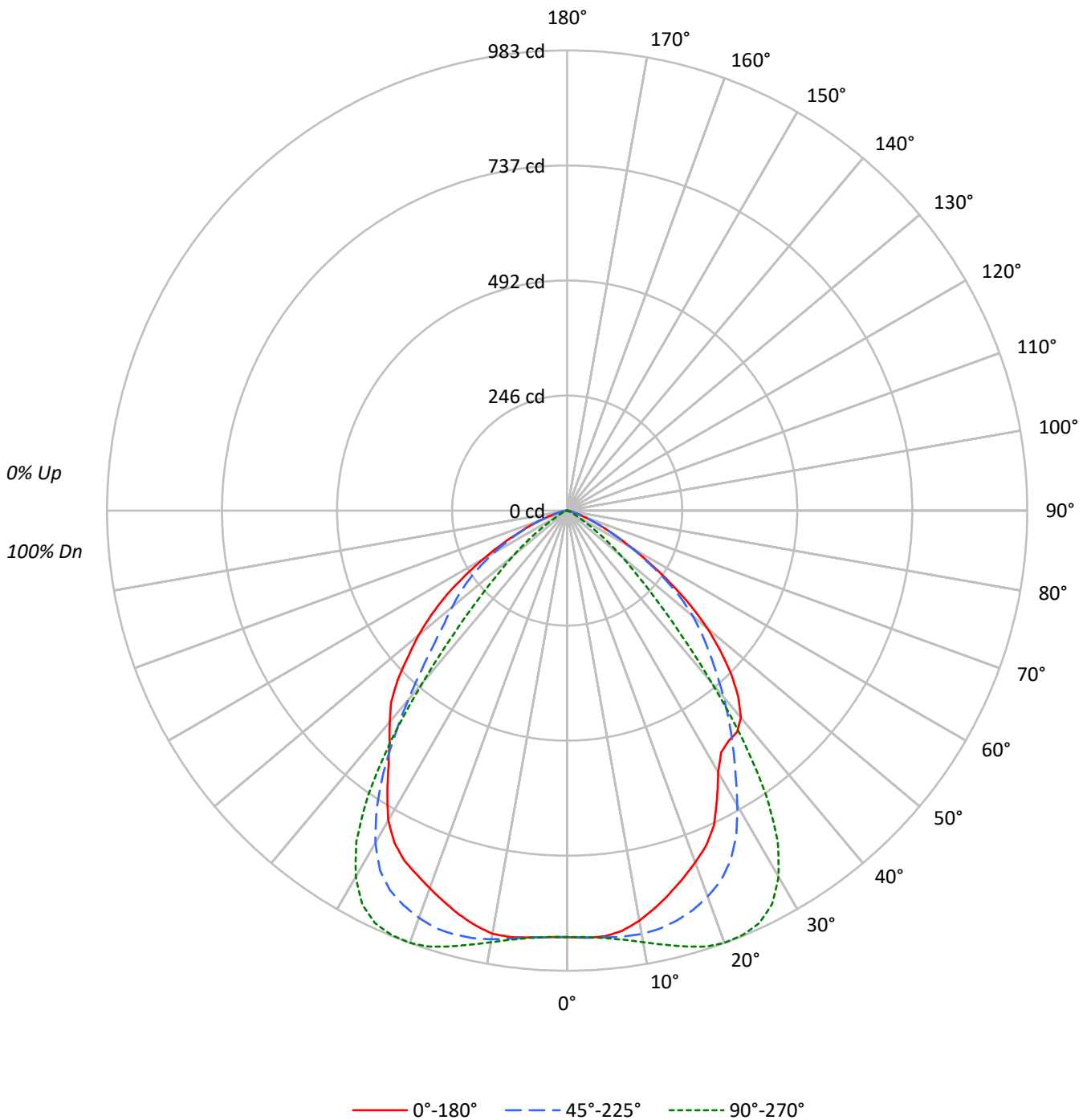
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	87.6	5.0
10°-20°	259.5	14.8
20°-30°	396.0	22.5
30°-40°	413.2	23.5
40°-50°	310.4	17.7
50°-60°	191.0	10.9
60°-70°	77.7	4.4
70°-80°	18.3	1.0
80°-90°	2.5	0.1
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°	743.1	42.3
0°-40°	1156.3	65.8
0°-60°	1657.6	94.4
0°-90°	1756.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1756.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	911	911	911	911	911	
5°	913	915	916	915	915	86
15°	847	906	964	937	893	239
25°	742	825	972	895	824	337
35°	601	618	740	684	665	380
45°	496	429	268	400	512	379
55°	268	254	70	254	314	241
65°	84	85	11	114	120	87
75°	14	14	2	26	27	17
85°	2	2	0	3	4	2
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°	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0
2.5°	913.4	912.0	913.4	913.4	914.0	912.9	913.4	914.0	912.9	912.9	912.9
5°	912.9	912.0	912.9	912.5	913.4	913.4	914.4	914.4	915.4	915.4	916.9
7.5°	905.2	903.3	905.2	906.6	907.6	909.6	912.0	914.0	915.9	917.8	920.2
10°	889.3	889.3	890.7	893.6	896.5	899.9	904.3	909.1	914.0	918.2	922.6
12.5°	869.4	867.9	870.9	874.8	879.1	884.5	891.2	898.4	906.2	914.8	921.7
15°	846.7	845.2	848.6	852.5	857.8	865.6	873.8	883.5	894.6	906.2	917.3
17.5°	823.5	823.0	826.4	831.7	836.1	844.3	854.9	866.5	879.1	894.6	909.1
20°	799.8	799.3	802.7	807.1	812.8	820.6	831.3	844.8	859.7	877.2	894.2
22.5°	775.1	775.6	778.5	783.3	788.2	796.4	807.5	821.1	837.6	856.4	875.2
25°	741.8	739.4	743.2	748.0	756.2	763.1	773.7	788.2	805.2	825.0	847.2
27.5°	693.4	692.9	696.4	700.6	708.0	716.2	727.8	742.7	760.6	782.4	804.2
30°	645.1	646.0	647.4	651.8	656.7	664.9	676.5	689.1	705.9	726.8	750.0
32.5°	612.2	612.2	614.1	617.1	620.4	624.7	632.9	642.2	655.2	669.7	686.7
35°	601.1	599.2	601.1	601.5	602.0	603.0	604.5	607.4	611.7	618.0	624.3
37.5°	596.2	594.8	594.8	592.9	590.4	587.5	583.6	579.3	574.4	568.1	563.4
40°	577.4	576.4	575.4	573.5	568.1	562.4	556.1	546.0	534.8	519.3	503.9
42.5°	541.1	540.1	539.7	535.7	530.9	524.1	516.9	506.2	492.3	472.4	450.2
45°	496.1	494.2	492.8	489.4	486.0	480.2	473.4	463.7	449.7	429.4	402.8
47.5°	443.9	442.9	442.5	441.0	437.6	434.2	429.9	422.1	409.6	390.3	362.7
50°	391.2	389.2	390.3	389.7	388.3	385.9	383.0	377.7	368.0	350.6	325.5
52.5°	330.8	330.8	330.3	331.8	332.2	331.8	332.2	326.4	318.2	305.1	283.8
55°	267.9	267.9	269.3	271.2	273.3	273.7	273.3	270.8	264.9	254.4	235.5
57.5°	208.9	207.9	210.8	213.8	215.7	217.6	216.1	214.2	210.8	202.2	187.6
60°	159.1	159.1	161.0	163.0	164.9	166.8	166.4	165.8	163.0	157.2	145.6
62.5°	117.0	117.4	117.4	118.9	120.9	122.8	124.3	122.8	121.4	117.4	109.8
65°	83.7	83.1	83.7	85.2	86.5	88.5	89.4	89.0	87.5	84.6	78.9
67.5°	56.1	55.6	57.5	58.0	59.0	61.0	60.4	61.0	60.4	58.0	53.2
70°	36.8	35.8	36.8	36.2	37.7	38.2	39.2	39.6	39.2	37.7	36.2
72.5°	22.7	22.3	22.7	23.2	23.7	24.2	25.1	25.1	24.6	23.7	21.7
75°	14.5	13.0	13.5	12.6	13.5	13.5	14.5	15.0	14.5	14.5	13.5
77.5°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	9.2	9.7	8.7	8.2
80°	4.4	4.4	4.8	4.8	4.8	5.3	4.8	4.8	4.8	5.3	3.8
82.5°	3.4	2.9	2.9	2.9	3.4	2.9	2.9	2.9	2.9	2.9	2.9
85°	1.5	1.9	1.5	1.0	1.5	1.5	1.9	1.5	1.5	1.5	1.9
87.5°	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	1.0	0.0
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°	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0
2.5°	913.4	912.5	912.5	912.0	912.9	912.0	912.5	912.0	912.0	912.9	912.0
5°	916.9	917.3	916.3	915.9	917.3	917.3	917.3	916.3	916.3	916.9	916.3
7.5°	921.7	922.6	923.1	923.6	924.5	925.1	925.1	924.5	924.1	925.5	923.6
10°	927.0	928.5	931.3	932.7	935.2	935.2	936.2	936.2	935.2	936.2	935.7
12.5°	925.1	933.8	938.6	942.0	945.3	948.3	949.3	949.7	949.3	951.2	949.3
15°	928.5	935.7	943.4	949.3	955.5	958.8	959.8	963.7	964.7	965.1	962.3
17.5°	923.1	936.2	944.4	953.1	962.3	968.5	974.4	976.8	977.3	978.2	974.4
20°	911.0	925.5	938.1	950.6	961.3	971.0	975.8	982.6	980.7	984.5	979.2
22.5°	894.6	911.0	927.0	943.4	954.6	966.2	976.3	981.1	983.6	983.6	977.7
25°	868.5	887.8	905.2	922.2	939.0	953.1	964.7	972.0	973.4	972.9	966.2
27.5°	827.9	848.6	869.0	888.3	909.1	925.5	939.0	947.8	950.2	950.2	943.0
30°	771.8	794.0	813.8	837.0	858.3	876.7	895.5	903.3	907.6	907.6	899.4
32.5°	705.0	723.9	742.3	765.0	788.2	809.0	826.9	837.6	842.8	842.4	835.1
35°	632.5	641.7	655.8	672.6	693.4	712.8	730.1	740.4	749.5	749.0	742.3
37.5°	559.9	557.6	559.0	565.3	578.4	591.9	605.4	615.0	622.8	626.2	624.7
40°	488.9	476.3	464.2	459.9	460.8	465.6	473.0	480.2	488.9	493.2	495.1
42.5°	425.0	403.8	382.5	366.5	357.3	354.5	357.9	360.2	365.5	371.8	378.1
45°	373.8	345.3	317.2	292.5	277.1	267.9	266.0	267.9	270.8	277.1	285.3
47.5°	331.8	298.3	267.0	239.4	216.7	204.5	201.2	200.2	203.1	208.9	220.0
50°	294.5	261.1	226.4	194.4	170.7	157.2	152.3	150.4	153.8	158.2	168.3
52.5°	253.9	221.0	185.2	154.2	129.6	115.5	110.2	107.3	109.2	115.1	125.2
55°	209.8	179.4	147.0	115.1	91.4	78.3	72.0	70.1	72.0	78.3	88.5
57.5°	165.8	140.2	113.2	83.1	61.9	48.8	42.5	40.6	45.9	48.4	59.0
60°	129.6	108.8	85.6	61.0	42.5	32.4	26.1	24.6	27.1	31.4	40.2
62.5°	97.2	84.1	65.8	43.5	31.4	20.8	17.4	16.0	17.4	20.8	27.6
65°	70.6	60.4	45.9	32.0	21.3	15.5	11.6	10.7	12.0	14.5	20.4
67.5°	48.4	40.6	32.0	22.3	14.5	9.7	8.2	8.2	8.7	10.7	15.0
70°	31.4	26.6	20.4	14.5	9.7	7.2	6.3	5.3	6.3	7.8	10.1
72.5°	19.8	16.9	13.0	10.1	7.2	5.3	4.4	3.8	4.8	5.9	7.8
75°	12.0	9.2	6.8	5.3	3.8	3.8	3.8	1.9	2.4	3.8	4.8
77.5°	7.2	6.3	5.3	4.4	3.4	1.9	1.9	1.9	2.4	2.9	4.4
80°	3.8	3.4	2.4	2.4	1.9	1.5	1.9	1.5	1.0	2.4	2.9
82.5°	2.4	1.9	1.9	1.9	2.4	1.0	1.5	1.0	1.5	1.9	1.5
85°	1.5	1.5	1.5	1.0	2.4	1.0	1.0	0.4	0.4	1.0	1.0
87.5°	0.0	0.4	0.4	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4
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°	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0	911.0
2.5°	912.5	912.0	912.5	912.0	912.0	912.0	912.5	912.5	912.0	912.0	912.9
5°	916.3	916.3	916.3	915.9	915.4	915.4	916.3	916.3	914.8	916.3	916.3
7.5°	924.5	923.1	924.5	922.6	921.7	922.2	922.6	921.7	920.7	921.2	921.2
10°	935.2	933.8	933.8	932.3	930.8	929.9	928.9	926.4	924.1	923.6	921.7
12.5°	947.8	945.3	943.9	941.0	938.6	935.2	932.3	928.5	923.6	920.2	916.9
15°	960.3	956.5	953.1	948.3	943.0	937.1	930.8	924.5	916.9	910.0	904.3
17.5°	970.5	965.1	958.8	951.2	943.4	934.8	925.5	916.3	905.2	896.5	889.8
20°	973.9	966.2	957.9	947.8	937.6	925.5	914.0	901.8	889.3	880.1	872.3
22.5°	969.5	960.3	950.2	939.6	926.0	912.9	899.4	885.4	874.2	861.8	854.4
25°	957.5	946.4	935.2	922.6	909.6	895.0	880.5	866.0	852.5	845.8	836.6
27.5°	932.7	920.7	908.6	895.5	880.5	866.0	851.1	837.0	825.4	816.2	810.9
30°	889.3	875.2	861.2	847.2	834.2	819.1	805.2	793.5	781.9	774.7	769.4
32.5°	822.5	810.0	795.9	782.4	770.3	757.7	746.1	736.0	727.8	722.9	719.1
35°	732.6	720.0	709.4	699.8	689.5	684.2	677.0	671.2	667.8	665.9	665.3
37.5°	619.4	612.2	608.8	606.8	604.9	603.4	604.5	606.8	608.8	612.2	616.1
40°	498.6	504.8	506.8	513.6	519.9	528.1	537.2	547.9	556.5	567.7	575.4
42.5°	388.3	399.9	413.4	428.0	443.5	458.4	476.8	493.8	509.2	523.2	535.3
45°	298.3	316.2	336.6	357.3	378.1	399.9	422.1	442.9	461.4	476.3	488.9
47.5°	232.5	252.4	278.6	304.2	329.3	354.9	379.6	401.4	416.8	431.3	442.5
50°	184.3	207.0	235.5	264.9	292.5	319.6	345.7	366.1	381.5	393.2	401.4
52.5°	142.6	169.8	198.8	229.7	259.2	288.7	312.9	331.8	344.2	354.5	360.7
55°	106.4	133.0	163.9	195.9	225.8	254.4	277.1	293.5	304.7	310.4	313.9
57.5°	76.8	101.0	132.0	163.9	191.0	218.1	236.5	251.4	257.7	261.1	262.6
60°	56.1	78.3	105.9	133.4	159.1	180.9	196.8	207.0	211.8	213.8	213.3
62.5°	41.1	60.4	84.1	107.3	128.1	146.0	158.6	165.4	167.8	168.8	167.3
65°	31.4	46.5	66.7	84.6	100.6	113.6	122.8	127.1	128.6	128.1	127.1
67.5°	23.2	34.9	49.8	63.3	74.9	85.2	90.0	93.8	94.7	93.4	91.9
70°	16.4	25.6	36.2	45.4	54.1	60.0	65.2	65.8	65.8	65.2	64.4
72.5°	11.6	17.9	24.6	30.9	36.2	40.6	42.5	44.0	43.5	43.1	42.1
75°	7.8	11.1	17.9	19.3	24.2	25.6	27.6	27.6	28.0	26.6	26.6
77.5°	4.8	7.8	10.7	12.6	14.5	16.4	17.4	17.4	17.9	17.4	17.4
80°	2.9	4.8	5.9	8.7	8.7	10.1	10.7	11.1	10.1	11.6	10.1
82.5°	1.9	2.9	4.4	4.4	5.3	6.3	6.3	6.8	6.8	6.3	6.3
85°	1.5	1.9	2.4	2.9	2.9	3.4	2.9	2.9	3.4	3.8	3.4
87.5°	0.4	1.0	0.4	1.0	1.0	1.9	1.5	1.5	1.5	1.9	1.9
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):

	165°	170°	175°	180°
0°	911.0	911.0	911.0	911.0
2.5°	912.0	912.5	912.0	912.0
5°	916.3	915.9	916.3	915.4
7.5°	919.7	919.7	919.2	919.2
10°	919.7	917.8	917.8	917.8
12.5°	912.5	910.0	908.6	907.6
15°	899.9	895.5	893.6	893.1
17.5°	883.5	879.6	877.2	875.7
20°	864.6	860.7	857.8	858.3
22.5°	848.1	843.9	841.8	840.9
25°	831.7	826.4	825.0	824.0
27.5°	805.2	802.2	800.8	799.3
30°	764.6	763.1	760.6	764.0
32.5°	717.6	715.2	713.2	714.7
35°	665.9	664.4	665.9	664.9
37.5°	618.5	619.9	621.9	622.8
40°	581.3	586.6	588.5	589.5
42.5°	544.1	550.2	554.2	556.5
45°	498.0	504.3	508.7	511.6
47.5°	450.7	456.0	460.4	459.9
50°	407.6	410.5	412.4	414.4
52.5°	364.2	364.2	364.6	364.6
55°	314.8	313.9	313.3	313.9
57.5°	260.7	259.7	259.2	257.7
60°	211.3	208.5	206.4	206.4
62.5°	165.4	162.0	160.5	160.1
65°	124.3	123.8	120.9	120.4
67.5°	90.0	88.0	86.1	86.5
70°	63.3	60.4	60.4	59.5
72.5°	41.1	39.6	39.2	39.2
75°	25.6	25.6	24.6	26.6
77.5°	16.9	16.9	16.4	16.9
80°	10.1	10.1	10.1	9.7
82.5°	6.3	6.8	6.3	6.3
85°	3.4	3.8	2.9	4.4
87.5°	1.9	2.4	1.9	2.4
90°	0.0	0.0	0.0	0.0

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