

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 EC8B20927 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 EC8B20927 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: 1542.4 lumens
Efficiency: N/A
Efficacy: 72.4 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

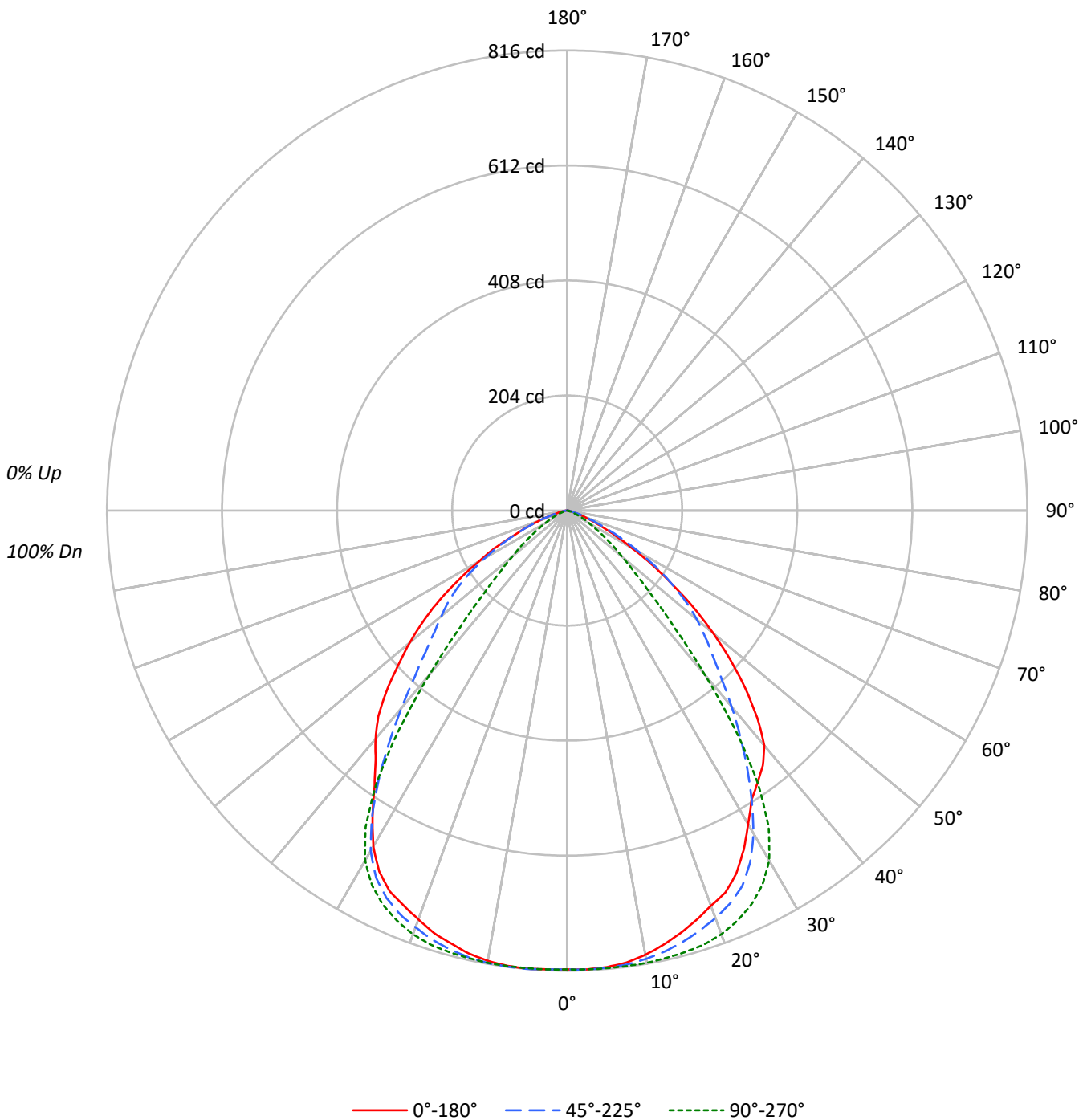
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	77.7	5.0
10°-20°	225.5	14.6
20°-30°	342.3	22.2
30°-40°	359.6	23.3
40°-50°	269.6	17.5
50°-60°	173.0	11.2
60°-70°	74.0	4.8
70°-80°	17.5	1.1
80°-90°	3.2	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°	645.6	41.9
0°-40°	1005.1	65.2
0°-60°	1447.7	93.9
0°-90°	1542.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1542.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	814	814	814	814	814	
5°	812	814	815	816	816	77
15°	776	792	810	805	795	219
25°	710	735	772	758	745	324
35°	589	556	589	582	595	370
45°	447	366	210	355	453	343
55°	226	226	78	236	276	205
65°	68	80	25	104	105	73
75°	10	12	4	21	21	15
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°	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8
2.5°	814.3	815.1	814.6	814.6	814.3	814.6	814.6	815.5	815.5	814.6	814.3
5°	812.5	813.4	813.4	812.5	812.5	814.6	813.4	814.3	814.3	813.8	813.8
7.5°	808.5	808.5	810.3	809.0	809.0	810.3	809.9	810.7	811.6	812.0	812.0
10°	799.8	800.7	801.1	801.1	801.6	802.9	803.7	805.5	806.4	807.2	807.6
12.5°	788.8	790.2	790.6	790.2	791.6	793.2	795.5	797.6	799.0	800.7	802.0
15°	775.8	775.8	776.7	777.9	778.8	781.4	783.7	786.3	789.8	792.0	794.1
17.5°	761.4	762.3	763.5	763.5	765.3	769.6	771.0	774.9	778.8	781.0	785.4
20°	745.6	746.6	747.8	748.7	750.9	754.4	757.0	760.5	764.9	768.8	773.2
22.5°	733.4	731.7	732.5	733.4	735.6	738.7	741.7	746.1	750.5	754.4	758.7
25°	709.9	710.2	711.6	712.5	715.1	717.6	721.2	726.4	730.4	734.7	739.6
27.5°	677.9	678.4	680.5	680.5	682.8	687.2	689.3	693.7	699.0	703.2	709.0
30°	641.7	642.6	642.6	644.3	645.6	647.8	650.0	654.3	657.0	660.9	668.8
32.5°	608.5	609.3	609.0	608.5	607.2	606.7	606.3	607.2	608.1	609.3	612.4
35°	588.8	586.7	584.9	581.8	578.4	574.0	570.0	564.8	560.0	556.1	551.7
37.5°	570.0	569.6	567.0	562.6	555.6	547.8	538.6	527.3	515.9	503.7	491.8
40°	543.8	542.5	540.3	534.3	526.4	516.7	504.6	490.5	472.2	453.4	434.2
42.5°	499.3	499.7	497.1	492.3	484.9	475.6	463.0	447.8	428.1	405.8	380.9
45°	447.3	447.3	446.4	442.5	437.3	429.9	420.2	407.6	388.3	365.6	339.0
47.5°	393.2	393.5	392.3	391.4	389.2	384.4	377.4	367.8	354.3	332.4	305.8
50°	338.1	338.1	340.3	339.9	339.9	338.1	335.0	329.4	317.6	300.0	275.2
52.5°	283.0	284.0	285.3	287.0	289.1	292.6	289.1	286.5	279.1	265.6	244.2
55°	226.2	227.1	229.3	232.4	235.0	238.5	239.4	239.4	235.5	226.2	210.2
57.5°	177.8	176.5	178.2	180.9	184.4	187.9	190.5	193.5	193.0	187.0	173.8
60°	133.6	134.1	135.5	138.0	140.6	143.7	147.3	149.8	151.1	148.0	139.7
62.5°	97.4	97.4	99.1	101.8	103.0	107.4	109.7	110.9	112.3	111.8	106.5
65°	68.2	69.0	69.9	71.2	72.6	75.1	76.4	79.1	80.0	80.3	76.4
67.5°	48.0	46.7	47.6	48.5	49.8	51.5	54.1	54.1	55.5	55.5	52.9
70°	30.6	30.6	31.0	32.3	33.2	33.6	34.5	35.3	36.7	36.2	36.2
72.5°	20.6	20.1	20.6	20.9	21.4	22.7	22.7	23.2	24.1	24.4	22.7
75°	10.5	10.9	11.8	11.4	12.7	11.8	12.3	13.5	13.0	12.3	12.3
77.5°	8.8	8.8	8.8	8.3	9.2	9.2	8.8	9.6	9.2	9.2	8.8
80°	6.1	6.5	6.1	5.6	6.1	5.6	5.6	5.6	5.6	5.6	5.3
82.5°	4.8	3.9	4.4	3.9	4.4	4.4	3.9	3.5	3.5	3.9	3.5
85°	3.5	2.6	3.0	3.0	2.6	2.6	2.6	2.6	2.6	2.1	2.1
87.5°	2.1	1.3	1.3	1.3	1.7	1.7	1.7	1.3	1.7	1.7	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°	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8
2.5°	815.1	814.6	815.5	815.1	815.1	814.6	815.1	814.6	815.5	813.8	814.3
5°	815.1	814.3	814.6	815.1	815.5	814.6	814.6	814.6	815.5	814.6	815.1
7.5°	813.4	812.9	814.3	815.1	814.6	814.3	815.1	814.6	815.5	815.1	816.0
10°	809.9	810.3	811.1	812.5	812.9	813.4	814.3	814.3	815.5	813.8	814.6
12.5°	804.6	806.4	808.5	809.4	811.1	811.1	812.0	812.5	813.4	812.9	814.3
15°	798.1	800.2	802.9	805.1	807.2	808.5	809.9	810.3	811.6	810.3	810.7
17.5°	790.2	792.8	796.7	799.4	802.9	804.2	805.9	806.8	808.1	807.2	807.6
20°	779.3	782.3	786.7	790.6	792.8	795.8	798.1	799.4	800.2	799.4	799.8
22.5°	764.0	768.4	774.0	777.2	781.4	784.1	784.6	787.6	789.8	787.6	788.4
25°	746.1	750.5	754.9	761.4	765.3	768.4	771.4	771.9	774.0	773.6	773.2
27.5°	716.4	722.0	729.4	734.7	739.9	744.8	748.2	749.1	751.3	750.5	750.9
30°	675.8	681.9	688.8	697.2	704.6	709.4	713.8	716.8	719.0	717.6	717.3
32.5°	618.1	624.3	631.7	639.9	648.7	655.6	660.9	664.9	667.5	666.6	664.4
35°	552.2	553.8	558.7	565.2	572.6	580.1	584.9	589.3	592.3	593.2	593.2
37.5°	484.4	478.8	475.3	475.3	479.6	482.6	487.0	489.7	494.4	496.2	497.6
40°	419.0	405.8	393.5	384.4	378.3	377.9	377.9	379.1	383.5	389.2	394.4
42.5°	360.3	339.4	320.6	303.6	291.4	284.4	281.4	281.7	285.3	290.5	299.2
45°	313.7	287.4	263.8	243.3	226.7	215.8	210.6	210.2	212.7	218.8	228.5
47.5°	277.4	249.4	222.8	199.2	181.2	169.5	163.4	161.7	163.4	169.1	180.5
50°	247.3	218.4	190.9	166.4	147.3	135.0	129.3	127.1	129.3	134.1	145.5
52.5°	219.3	189.6	163.8	140.2	119.7	109.2	103.0	101.8	103.0	108.8	117.9
55°	187.0	161.7	136.2	112.7	94.8	84.3	79.5	78.2	79.5	84.7	94.4
57.5°	155.0	133.2	110.9	89.6	74.2	65.0	60.8	59.0	62.0	65.5	76.8
60°	125.3	107.9	89.1	70.3	57.7	49.4	45.9	45.4	46.4	50.6	58.5
62.5°	98.3	83.9	69.0	53.8	43.2	39.7	35.3	35.0	35.8	38.5	44.6
65°	70.8	61.6	50.3	39.3	31.0	26.2	24.4	24.9	25.8	27.6	33.2
67.5°	49.4	42.8	35.0	27.6	21.4	19.2	17.4	17.0	17.4	20.6	23.6
70°	33.2	29.2	23.6	20.9	14.8	11.8	12.3	10.9	12.7	12.7	15.3
72.5°	21.8	19.2	15.8	12.3	10.5	8.3	8.3	7.9	8.8	9.2	11.4
75°	11.4	8.8	8.8	6.1	4.4	2.1	3.9	3.5	3.0	3.5	4.4
77.5°	7.9	6.5	6.1	4.8	4.4	3.5	3.5	3.5	3.5	3.9	4.4
80°	4.8	4.8	3.5	3.0	2.6	2.1	2.6	2.6	2.6	2.6	3.0
82.5°	3.0	2.6	2.6	2.1	2.1	1.7	1.7	1.7	1.7	1.7	2.6
85°	2.6	1.7	1.7	1.3	1.7	3.0	1.3	1.7	1.7	1.7	1.3
87.5°	0.9	1.3	1.3	1.3	0.9	0.4	0.9	1.3	1.3	2.1	1.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8	813.8
2.5°	815.1	815.5	815.5	815.1	815.1	814.3	816.0	814.6	815.1	816.9	815.5
5°	816.0	816.4	816.4	816.0	816.0	816.0	816.4	816.4	816.0	815.5	816.4
7.5°	817.8	817.3	817.3	816.4	816.4	815.5	816.4	815.1	816.0	815.1	816.4
10°	815.5	816.0	815.5	815.1	815.1	814.6	814.6	813.4	813.8	812.5	813.4
12.5°	814.3	813.8	813.8	812.9	812.0	811.1	810.7	809.4	809.4	806.4	807.6
15°	810.7	811.1	809.9	808.1	807.2	805.1	804.2	802.5	800.7	798.5	799.0
17.5°	807.6	806.4	804.6	802.9	799.4	797.6	795.8	793.2	792.3	789.8	788.8
20°	798.5	797.6	795.5	792.3	790.2	786.3	784.6	781.9	779.7	777.2	775.8
22.5°	786.7	785.8	783.2	780.2	776.7	774.9	773.2	768.4	766.1	763.5	763.1
25°	771.9	770.5	767.9	764.4	762.6	757.9	756.1	752.6	751.7	749.1	748.7
27.5°	749.1	747.3	744.3	739.9	736.9	733.8	732.2	729.4	728.7	726.0	725.5
30°	715.1	712.9	706.7	705.0	699.8	696.7	696.7	693.2	693.7	691.9	691.9
32.5°	661.4	657.9	653.1	649.6	646.1	644.3	644.3	642.9	643.8	643.8	644.7
35°	590.2	585.3	582.8	580.5	580.5	582.3	587.5	588.8	591.4	593.7	595.4
37.5°	498.8	498.4	501.4	504.1	510.6	518.1	527.3	535.1	542.5	547.8	553.1
40°	400.2	411.1	419.7	432.0	442.0	456.5	473.1	486.6	499.3	508.5	518.1
42.5°	312.3	326.2	344.7	362.6	380.5	400.2	422.0	440.8	457.3	470.0	480.0
45°	243.3	262.6	284.8	307.6	330.6	355.2	377.9	397.0	414.6	427.6	437.7
47.5°	196.1	217.1	242.4	267.3	293.5	319.3	344.7	361.2	375.6	386.1	395.3
50°	162.0	184.4	210.9	239.4	265.6	291.4	313.2	329.4	341.1	350.3	356.0
52.5°	135.5	159.0	187.4	215.8	242.0	265.6	285.3	297.4	307.1	313.7	318.8
55°	111.8	134.5	161.2	187.9	213.6	235.9	252.0	261.2	268.7	272.6	275.6
57.5°	91.4	112.3	136.7	161.2	183.5	201.8	214.4	223.6	227.1	230.2	229.7
60°	71.7	91.4	113.6	134.5	153.8	168.6	177.8	183.0	185.6	187.0	186.1
62.5°	56.4	74.2	91.4	109.7	123.6	136.2	145.0	145.0	146.4	146.8	148.0
65°	42.0	55.5	70.3	83.9	95.2	103.5	108.3	109.7	111.4	110.9	110.0
67.5°	31.0	41.1	52.0	62.0	69.9	75.1	78.6	81.7	81.2	80.3	80.0
70°	21.4	28.0	37.6	43.6	49.4	54.6	55.5	55.9	56.4	56.8	55.9
72.5°	14.8	19.7	24.9	30.2	33.6	35.8	38.0	38.5	38.5	38.5	38.0
75°	7.4	10.0	14.8	17.0	20.1	20.9	22.7	22.7	24.1	22.3	21.8
77.5°	6.5	7.9	10.5	12.3	13.5	14.8	15.3	16.7	16.2	15.3	15.8
80°	3.9	4.8	6.5	7.4	9.2	9.6	10.0	10.5	10.0	10.5	10.5
82.5°	3.0	3.5	4.4	4.4	5.6	5.6	6.1	6.1	6.5	6.5	6.5
85°	1.7	3.0	2.6	5.3	3.5	3.5	4.4	5.3	4.4	4.4	5.3
87.5°	1.7	1.7	1.3	1.7	1.7	1.7	2.1	2.6	2.6	3.0	2.6
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°	813.8	813.8	813.8	813.8
2.5°	815.1	816.0	814.6	814.3
5°	816.4	816.4	815.5	815.5
7.5°	816.4	816.4	815.1	814.3
10°	812.9	812.9	811.6	810.7
12.5°	806.4	806.4	805.9	804.6
15°	798.1	798.1	796.3	795.0
17.5°	786.7	787.6	785.4	785.4
20°	774.4	774.0	772.3	771.4
22.5°	761.8	760.9	760.5	757.9
25°	748.2	747.3	746.1	744.8
27.5°	725.1	724.7	723.4	721.6
30°	689.7	689.3	687.6	687.6
32.5°	643.8	643.4	641.7	642.2
35°	596.2	598.1	597.2	595.4
37.5°	556.5	557.8	558.7	557.8
40°	523.4	527.3	527.6	528.5
42.5°	487.9	493.2	494.9	495.8
45°	445.5	450.3	454.3	453.4
47.5°	402.3	405.8	409.3	406.7
50°	360.8	363.0	364.3	364.3
52.5°	321.5	321.5	321.1	321.5
55°	276.5	276.5	274.7	275.6
57.5°	229.3	230.2	228.9	226.7
60°	185.6	183.5	182.6	181.2
62.5°	144.6	144.6	141.5	145.5
65°	108.3	107.0	105.8	105.3
67.5°	78.6	78.2	76.8	76.4
70°	55.5	53.8	53.3	52.4
72.5°	37.1	37.1	36.2	36.2
75°	22.7	20.6	20.1	20.6
77.5°	15.8	15.3	15.3	14.8
80°	10.5	10.0	10.9	9.6
82.5°	6.5	7.0	6.5	7.0
85°	4.4	5.3	4.8	4.8
87.5°	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)