

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: P246092

Luminaire Tested: **LSR8B20D010 EC8B20927 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246092
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1703.3 lumens
Efficiency: N/A
Efficacy: 80.0 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

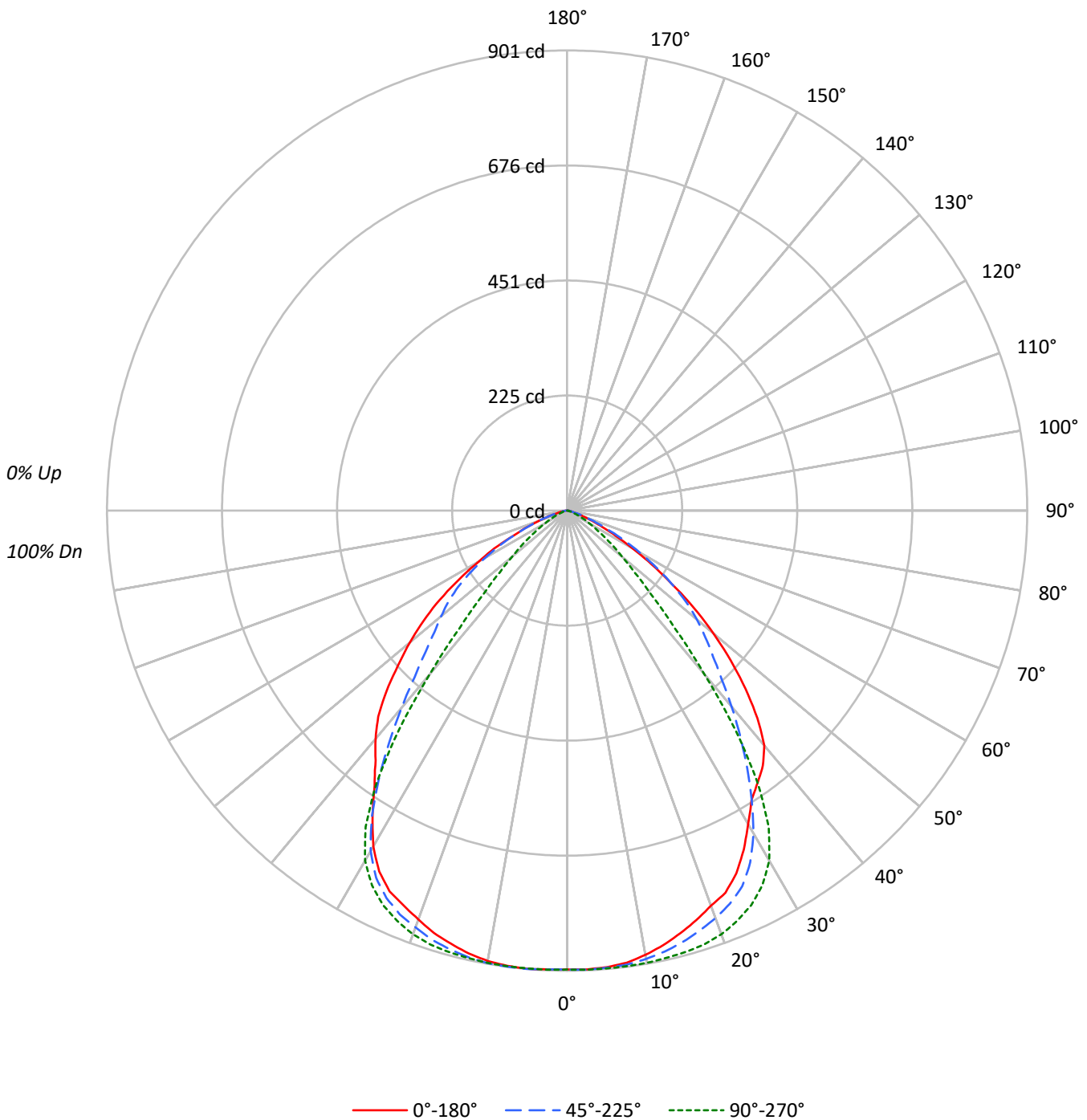
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	85.8	5.0
10°-20°	249.1	14.6
20°-30°	378.0	22.2
30°-40°	397.1	23.3
40°-50°	297.7	17.5
50°-60°	191.0	11.2
60°-70°	81.7	4.8
70°-80°	19.3	1.1
80°-90°	3.6	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°	712.9	41.9
0°-40°	1110.0	65.2
0°-60°	1598.6	93.9
0°-90°	1703.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	899	899	899	899	899	
5°	897	899	900	901	901	85
15°	857	875	895	889	878	242
25°	784	811	852	837	822	358
35°	650	614	651	643	657	408
45°	494	404	232	392	501	378
55°	250	250	86	260	304	227
65°	75	89	27	114	116	80
75°	12	14	4	23	23	17
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°	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6
2.5°	899.1	900.1	899.7	899.7	899.1	899.7	899.7	900.6	900.6	899.7	899.1
5°	897.2	898.2	898.2	897.2	897.2	899.7	898.2	899.1	899.1	898.6	898.6
7.5°	892.9	892.9	894.8	893.4	893.4	894.8	894.4	895.3	896.3	896.7	896.7
10°	883.2	884.2	884.7	884.7	885.2	886.6	887.6	889.5	890.4	891.4	891.9
12.5°	871.2	872.7	873.1	872.7	874.1	876.0	878.4	880.9	882.2	884.2	885.6
15°	856.7	856.7	857.7	859.2	860.1	863.0	865.4	868.3	872.1	874.6	876.9
17.5°	840.8	841.7	843.2	843.2	845.1	849.9	851.4	855.8	860.1	862.5	867.4
20°	823.4	824.4	825.9	826.8	829.2	833.1	836.0	839.8	844.6	849.0	853.8
22.5°	809.9	808.0	809.0	809.9	812.4	815.7	819.1	824.0	828.7	833.1	837.9
25°	783.9	784.4	785.8	786.7	789.6	792.6	796.4	802.2	806.5	811.4	816.6
27.5°	748.7	749.1	751.5	751.5	754.0	758.8	761.2	766.0	771.9	776.6	782.9
30°	708.6	709.5	709.5	711.6	712.9	715.4	717.8	722.6	725.5	729.8	738.6
32.5°	672.0	672.9	672.4	672.0	670.5	670.1	669.5	670.5	671.5	672.9	676.2
35°	650.2	647.8	645.9	642.5	638.7	633.8	629.6	623.7	618.4	614.0	609.3
37.5°	629.6	629.0	626.2	621.3	613.6	604.9	594.8	582.2	569.7	556.2	543.2
40°	600.5	599.1	596.7	589.9	581.3	570.6	557.1	541.7	521.4	500.7	479.5
42.5°	551.4	551.8	549.0	543.6	535.4	525.3	511.3	494.4	472.7	448.1	420.6
45°	494.0	494.0	493.0	488.7	482.8	474.6	464.1	450.1	428.8	403.8	374.3
47.5°	434.1	434.6	433.1	432.2	429.8	424.5	416.8	406.1	391.2	367.1	337.6
50°	373.4	373.4	375.8	375.3	375.3	373.4	370.0	363.7	350.7	331.4	303.9
52.5°	312.5	313.5	315.0	316.9	319.3	323.2	319.3	316.5	308.2	293.3	269.7
55°	249.9	250.9	253.2	256.6	259.5	263.4	264.4	264.4	260.0	249.9	232.0
57.5°	196.3	194.8	196.8	199.7	203.5	207.4	210.3	213.6	213.2	206.4	192.0
60°	147.6	148.0	149.5	152.4	155.4	158.7	162.6	165.5	167.0	163.6	154.4
62.5°	107.6	107.6	109.5	112.4	113.8	118.7	121.0	122.5	124.0	123.5	117.7
65°	75.3	76.2	77.2	78.6	80.1	82.9	84.4	87.3	88.3	88.8	84.4
67.5°	53.1	51.6	52.5	53.6	55.0	56.9	59.8	59.8	61.3	61.3	58.4
70°	33.8	33.8	34.2	35.7	36.7	37.1	38.1	39.0	40.5	40.1	40.1
72.5°	22.7	22.2	22.7	23.2	23.6	25.1	25.1	25.5	26.6	27.0	25.1
75°	11.6	12.0	13.0	12.6	14.0	13.0	13.5	15.0	14.5	13.5	13.5
77.5°	9.7	9.7	9.7	9.2	10.1	10.1	9.7	10.6	10.1	10.1	9.7
80°	6.8	7.2	6.8	6.3	6.8	6.3	6.3	6.3	6.3	6.3	5.7
82.5°	5.3	4.4	4.8	4.4	4.8	4.8	4.4	3.8	3.8	4.4	3.8
85°	3.8	2.9	3.4	3.4	2.9	2.9	2.9	2.9	2.9	2.4	2.4
87.5°	2.4	1.5	1.5	1.5	1.9	1.9	1.9	1.5	1.9	1.9	1.0
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°	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6
2.5°	900.1	899.7	900.6	900.1	900.1	899.7	900.1	899.7	900.6	898.6	899.1
5°	900.1	899.1	899.7	900.1	900.6	899.7	899.7	899.7	900.6	899.7	900.1
7.5°	898.2	897.8	899.1	900.1	899.7	899.1	900.1	899.7	900.6	900.1	901.1
10°	894.4	894.8	895.7	897.2	897.8	898.2	899.1	899.1	900.6	898.6	899.7
12.5°	888.5	890.4	892.9	893.8	895.7	895.7	896.7	897.2	898.2	897.8	899.1
15°	881.3	883.7	886.6	889.0	891.4	892.9	894.4	894.8	896.3	894.8	895.3
17.5°	872.7	875.5	879.9	882.8	886.6	888.1	890.0	891.0	892.4	891.4	891.9
20°	860.5	863.9	868.7	873.1	875.5	878.8	881.3	882.8	883.7	882.8	883.2
22.5°	843.6	848.5	854.8	858.2	863.0	865.9	866.4	869.7	872.1	869.7	870.8
25°	824.0	828.7	833.5	840.8	845.1	848.5	851.8	852.4	854.8	854.3	853.8
27.5°	791.1	797.4	805.6	811.4	817.2	822.5	826.3	827.3	829.7	828.7	829.2
30°	746.2	753.0	760.7	769.8	778.1	783.3	788.2	791.6	794.0	792.6	792.1
32.5°	682.5	689.3	697.5	706.7	716.3	724.1	729.8	734.2	737.1	736.1	733.7
35°	609.8	611.7	616.9	624.2	632.4	640.6	645.9	650.7	654.1	655.1	655.1
37.5°	534.9	528.6	524.8	524.8	529.6	533.0	537.9	540.8	546.1	548.0	549.4
40°	462.6	448.1	434.6	424.5	417.7	417.3	417.3	418.7	423.6	429.8	435.6
42.5°	397.9	374.8	354.0	335.2	321.8	314.0	310.6	311.2	315.0	320.7	330.4
45°	346.4	317.4	291.4	268.7	250.3	238.3	232.5	232.0	234.9	241.6	252.3
47.5°	306.3	275.4	246.0	219.9	200.1	187.2	180.5	178.5	180.5	186.6	199.2
50°	273.0	241.2	210.8	183.8	162.6	149.1	142.8	140.4	142.8	148.0	160.6
52.5°	242.1	209.4	180.9	154.8	132.2	120.6	113.8	112.4	113.8	120.2	130.3
55°	206.4	178.5	150.5	124.4	104.6	93.1	87.8	86.4	87.8	93.6	104.2
57.5°	171.2	147.2	122.5	98.9	82.0	71.9	67.0	65.1	68.5	72.3	84.9
60°	138.5	119.1	98.4	77.6	63.7	54.6	50.6	50.2	51.1	55.9	64.7
62.5°	108.6	92.6	76.2	59.3	47.7	43.9	39.0	38.6	39.6	42.4	49.2
65°	78.2	68.1	55.5	43.4	34.2	28.9	27.0	27.4	28.5	30.4	36.7
67.5°	54.6	47.2	38.6	30.4	23.6	21.3	19.3	18.8	19.3	22.7	26.1
70°	36.7	32.3	26.1	23.2	16.4	13.0	13.5	12.0	14.0	14.0	16.9
72.5°	24.1	21.3	17.3	13.5	11.6	9.2	9.2	8.7	9.7	10.1	12.6
75°	12.6	9.7	9.7	6.8	4.8	2.4	4.4	3.8	3.4	3.8	4.8
77.5°	8.7	7.2	6.8	5.3	4.8	3.8	3.8	3.8	3.8	4.4	4.8
80°	5.3	5.3	3.8	3.4	2.9	2.4	2.9	2.9	2.9	2.9	3.4
82.5°	3.4	2.9	2.9	2.4	2.4	1.9	1.9	1.9	1.9	1.9	2.9
85°	2.9	1.9	1.9	1.5	1.9	3.4	1.5	1.9	1.9	1.9	1.5
87.5°	1.0	1.5	1.5	1.5	1.0	0.4	1.0	1.5	1.5	2.4	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6	898.6
2.5°	900.1	900.6	900.6	900.1	900.1	899.1	901.1	899.7	900.1	902.0	900.6
5°	901.1	901.6	901.6	901.1	901.1	901.1	901.6	901.6	901.1	900.6	901.6
7.5°	903.0	902.5	902.5	901.6	901.6	900.6	901.6	900.1	901.1	900.1	901.6
10°	900.6	901.1	900.6	900.1	900.1	899.7	899.7	898.2	898.6	897.2	898.2
12.5°	899.1	898.6	898.6	897.8	896.7	895.7	895.3	893.8	893.8	890.4	891.9
15°	895.3	895.7	894.4	892.4	891.4	889.0	888.1	886.2	884.2	881.8	882.2
17.5°	891.9	890.4	888.5	886.6	882.8	880.9	878.8	876.0	875.0	872.1	871.2
20°	881.8	880.9	878.4	875.0	872.7	868.3	866.4	863.4	861.1	858.2	856.7
22.5°	868.7	867.8	864.9	861.5	857.7	855.8	853.8	848.5	846.1	843.2	842.7
25°	852.4	851.0	848.0	844.2	842.2	836.9	835.0	831.2	830.1	827.3	826.8
27.5°	827.3	825.3	821.9	817.2	813.8	810.3	808.4	805.6	804.6	801.7	801.2
30°	789.6	787.3	780.5	778.6	772.8	769.4	769.4	765.6	766.0	764.1	764.1
32.5°	730.4	726.4	721.1	717.3	713.5	711.6	711.6	710.1	711.0	711.0	712.0
35°	651.7	646.4	643.5	641.0	641.0	643.1	648.8	650.2	653.2	655.5	657.4
37.5°	550.9	550.4	553.7	556.6	563.8	572.1	582.2	591.0	599.1	604.9	610.6
40°	441.9	453.9	463.6	477.1	488.1	504.1	522.4	537.4	551.4	561.5	572.1
42.5°	344.9	360.3	380.6	400.4	420.2	441.9	466.0	486.7	505.0	519.1	530.1
45°	268.7	289.9	314.6	339.6	365.2	392.2	417.3	438.5	457.8	472.3	483.3
47.5°	216.6	239.7	267.8	295.2	324.1	352.6	380.6	398.9	414.8	426.4	436.6
50°	179.0	203.5	233.0	264.4	293.3	321.8	345.8	363.7	376.8	386.9	393.2
52.5°	149.5	175.6	206.9	238.3	267.2	293.3	315.0	328.5	339.1	346.4	352.1
55°	123.5	148.6	178.0	207.4	235.9	260.4	278.3	288.4	296.7	301.0	304.4
57.5°	100.8	124.0	151.0	178.0	202.6	222.9	236.8	246.9	250.9	254.2	253.7
60°	79.1	100.8	125.4	148.6	169.8	186.2	196.3	202.2	205.0	206.4	205.5
62.5°	62.2	82.0	100.8	121.0	136.5	150.5	160.2	160.2	161.5	162.1	163.6
65°	46.4	61.3	77.6	92.6	105.2	114.3	119.6	121.0	123.0	122.5	121.6
67.5°	34.2	45.3	57.4	68.5	77.2	82.9	86.9	90.2	89.8	88.8	88.3
70°	23.6	30.8	41.5	48.3	54.6	60.3	61.3	61.8	62.2	62.7	61.8
72.5°	16.4	21.7	27.4	33.3	37.1	39.6	42.0	42.4	42.4	42.4	42.0
75°	8.2	11.1	16.4	18.8	22.2	23.2	25.1	25.1	26.6	24.6	24.1
77.5°	7.2	8.7	11.6	13.5	15.0	16.4	16.9	18.3	17.9	16.9	17.3
80°	4.4	5.3	7.2	8.2	10.1	10.6	11.1	11.6	11.1	11.6	11.6
82.5°	3.4	3.8	4.8	4.8	6.3	6.3	6.8	6.8	7.2	7.2	7.2
85°	1.9	3.4	2.9	5.7	3.8	3.8	4.8	5.7	4.8	4.8	5.7
87.5°	1.9	1.9	1.5	1.9	1.9	1.9	2.4	2.9	2.9	3.4	2.9
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°	898.6	898.6	898.6	898.6
2.5°	900.1	901.1	899.7	899.1
5°	901.6	901.6	900.6	900.6
7.5°	901.6	901.6	900.1	899.1
10°	897.8	897.8	896.3	895.3
12.5°	890.4	890.4	890.0	888.5
15°	881.3	881.3	879.4	878.0
17.5°	868.7	869.7	867.4	867.4
20°	855.2	854.8	852.9	851.8
22.5°	841.3	840.3	839.8	836.9
25°	826.3	825.3	824.0	822.5
27.5°	800.8	800.2	798.9	796.8
30°	761.6	761.2	759.3	759.3
32.5°	711.0	710.6	708.6	709.1
35°	658.5	660.4	659.4	657.4
37.5°	614.6	616.1	616.9	616.1
40°	577.9	582.2	582.8	583.6
42.5°	538.8	544.6	546.5	547.5
45°	492.1	497.4	501.6	500.7
47.5°	444.3	448.1	452.0	449.1
50°	398.5	400.8	402.3	402.3
52.5°	355.0	355.0	354.6	355.0
55°	305.3	305.3	303.4	304.4
57.5°	253.2	254.2	252.8	250.3
60°	205.0	202.6	201.6	200.1
62.5°	159.6	159.6	156.3	160.6
65°	119.6	118.2	116.8	116.2
67.5°	86.9	86.4	84.9	84.4
70°	61.3	59.3	58.8	57.9
72.5°	40.9	40.9	40.1	40.1
75°	25.1	22.7	22.2	22.7
77.5°	17.3	16.9	16.9	16.4
80°	11.6	11.1	12.0	10.6
82.5°	7.2	7.8	7.2	7.8
85°	4.8	5.7	5.3	5.3
87.5°	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)