

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: P246170

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246170
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 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1450.0 lumens
Efficiency: N/A
Efficacy: 68.1 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

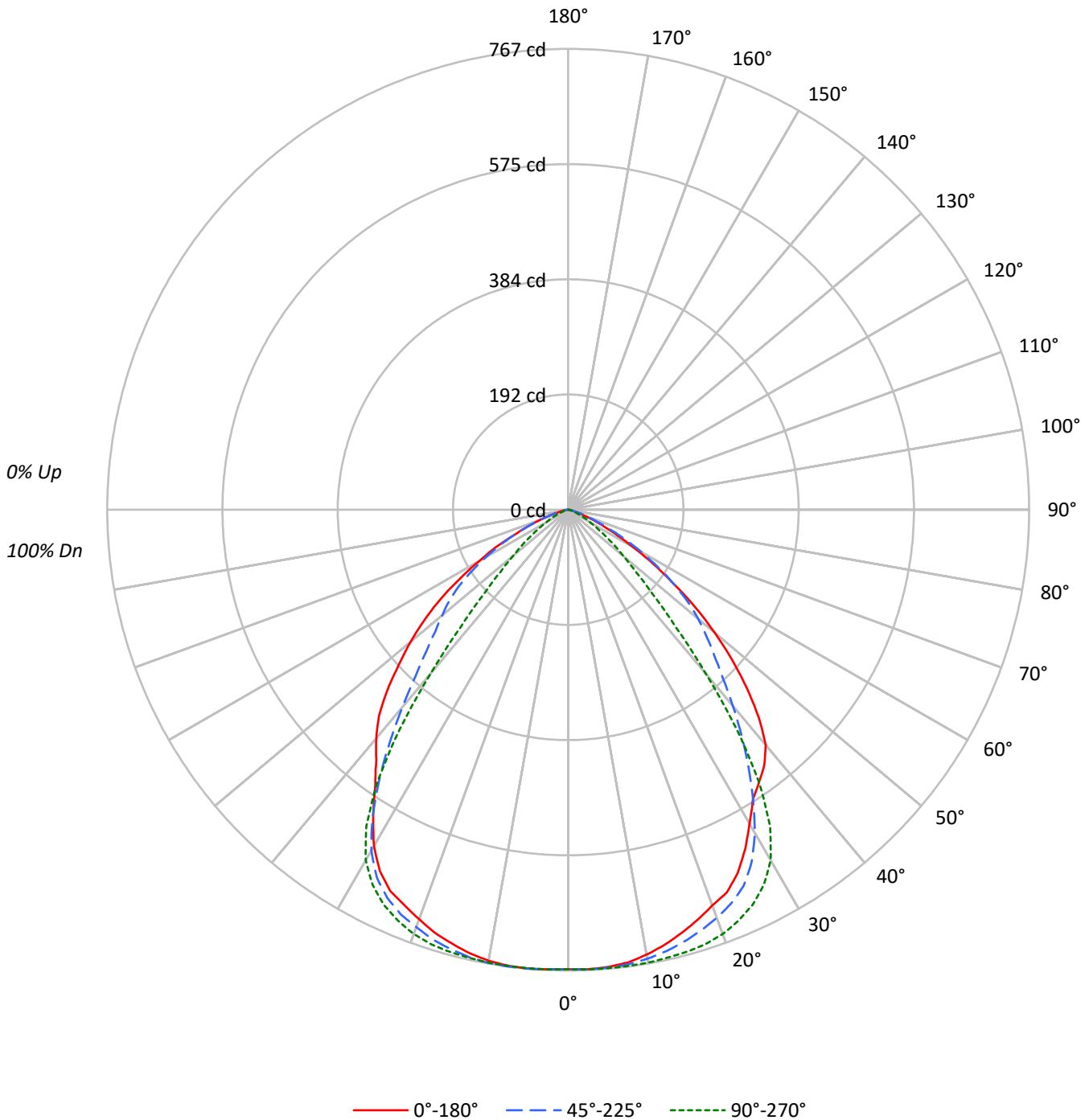
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	73.0	5.0
10°-20°	212.0	14.6
20°-30°	321.8	22.2
30°-40°	338.0	23.3
40°-50°	253.4	17.5
50°-60°	162.6	11.2
60°-70°	69.6	4.8
70°-80°	16.4	1.1
80°-90°	3.0	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°	606.9	41.9
0°-40°	944.9	65.2
0°-60°	1360.9	93.9
0°-90°	1450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1450.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	765	765	765	765	765	
5°	764	765	766	767	767	73
15°	729	744	762	757	747	206
25°	667	691	726	712	700	305
35°	554	523	554	547	560	347
45°	420	344	198	334	426	322
55°	213	213	74	222	259	193
65°	64	76	23	97	99	68
75°	10	12	3	20	19	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°	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0
2.5°	765.5	766.3	765.9	765.9	765.5	765.9	765.9	766.7	766.7	765.9	765.5
5°	763.8	764.6	764.6	763.8	763.8	765.9	764.6	765.5	765.5	765.0	765.0
7.5°	760.1	760.1	761.8	760.5	760.5	761.8	761.4	762.2	763.0	763.4	763.4
10°	751.9	752.7	753.1	753.1	753.6	754.8	755.6	757.3	758.1	758.9	759.3
12.5°	741.6	742.9	743.3	742.9	744.1	745.7	747.8	749.9	751.1	752.7	754.0
15°	729.3	729.3	730.1	731.4	732.2	734.7	736.7	739.2	742.5	744.5	746.6
17.5°	715.8	716.6	717.8	717.8	719.5	723.6	724.8	728.5	732.2	734.3	738.4
20°	701.0	701.8	703.0	703.9	705.9	709.2	711.7	714.9	719.1	722.8	726.9
22.5°	689.5	687.8	688.7	689.5	691.5	694.4	697.3	701.4	705.5	709.2	713.3
25°	667.3	667.7	669.0	669.8	672.2	674.7	678.0	682.9	686.6	690.7	695.2
27.5°	637.3	637.7	639.8	639.8	641.8	646.0	648.0	652.1	657.1	661.2	666.5
30°	603.3	604.1	604.1	605.7	606.9	609.0	611.1	615.2	617.6	621.3	628.7
32.5°	572.0	572.9	572.4	572.0	570.8	570.4	570.0	570.8	571.6	572.9	575.7
35°	553.6	551.5	549.9	547.0	543.7	539.6	535.9	531.0	526.5	522.8	518.7
37.5°	535.9	535.5	533.0	528.9	522.3	515.0	506.3	495.7	485.0	473.5	462.4
40°	511.3	510.0	508.0	502.2	494.8	485.8	474.3	461.2	443.9	426.3	408.2
42.5°	469.4	469.8	467.3	462.8	455.8	447.2	435.3	420.9	402.4	381.5	358.1
45°	420.5	420.5	419.7	416.0	411.1	404.1	395.0	383.1	365.1	343.7	318.7
47.5°	369.6	370.0	368.8	367.9	365.9	361.4	354.8	345.8	333.0	312.5	287.5
50°	317.8	317.8	319.9	319.5	319.5	317.8	315.0	309.6	298.5	282.1	258.7
52.5°	266.1	266.9	268.2	269.8	271.9	275.1	271.9	269.4	262.4	249.7	229.6
55°	212.7	213.5	215.6	218.5	220.9	224.2	225.0	225.0	221.3	212.7	197.5
57.5°	167.1	165.9	167.6	170.0	173.3	176.6	179.0	181.9	181.5	175.8	163.4
60°	125.7	126.1	127.3	129.8	132.2	135.1	138.4	140.9	142.1	139.2	131.4
62.5°	91.6	91.6	93.2	95.7	96.9	101.0	103.1	104.3	105.5	105.1	100.2
65°	64.1	64.9	65.7	66.9	68.2	70.6	71.9	74.3	75.1	75.6	71.9
67.5°	45.2	43.9	44.8	45.6	46.8	48.5	50.9	50.9	52.1	52.1	49.7
70°	28.7	28.7	29.2	30.4	31.2	31.6	32.4	33.3	34.5	34.1	34.1
72.5°	19.3	18.9	19.3	19.7	20.1	21.4	21.4	21.8	22.6	23.0	21.4
75°	9.9	10.3	11.1	10.7	11.9	11.1	11.5	12.7	12.3	11.5	11.5
77.5°	8.2	8.2	8.2	7.8	8.6	8.6	8.2	9.0	8.6	8.6	8.2
80°	5.7	6.2	5.7	5.3	5.7	5.3	5.3	5.3	5.3	5.3	4.9
82.5°	4.5	3.7	4.1	3.7	4.1	4.1	3.7	3.3	3.3	3.7	3.3
85°	3.3	2.5	2.9	2.9	2.5	2.5	2.5	2.5	2.5	2.0	2.0
87.5°	2.0	1.2	1.2	1.2	1.6	1.6	1.6	1.2	1.6	1.6	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°	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0
2.5°	766.3	765.9	766.7	766.3	766.3	765.9	766.3	765.9	766.7	765.0	765.5
5°	766.3	765.5	765.9	766.3	766.7	765.9	765.9	765.9	766.7	765.9	766.3
7.5°	764.6	764.2	765.5	766.3	765.9	765.5	766.3	765.9	766.7	766.3	767.1
10°	761.4	761.8	762.6	763.8	764.2	764.6	765.5	765.5	766.7	765.0	765.9
12.5°	756.4	758.1	760.1	760.9	762.6	762.6	763.4	763.8	764.6	764.2	765.5
15°	750.3	752.3	754.8	756.8	758.9	760.1	761.4	761.8	763.0	761.8	762.2
17.5°	742.9	745.3	749.0	751.5	754.8	756.0	757.7	758.5	759.7	758.9	759.3
20°	732.6	735.5	739.6	743.3	745.3	748.2	750.3	751.5	752.3	751.5	751.9
22.5°	718.2	722.3	727.7	730.6	734.7	737.1	737.5	740.4	742.5	740.4	741.2
25°	701.4	705.5	709.6	715.8	719.5	722.3	725.2	725.6	727.7	727.3	726.9
27.5°	673.5	678.8	685.8	690.7	695.6	700.2	703.5	704.3	706.3	705.5	705.9
30°	635.3	641.0	647.6	655.4	662.4	666.9	671.0	673.9	675.9	674.7	674.3
32.5°	581.1	586.8	593.8	601.6	609.8	616.4	621.3	625.0	627.5	626.7	624.6
35°	519.1	520.7	525.2	531.4	538.4	545.3	549.9	554.0	556.8	557.7	557.7
37.5°	455.4	450.1	446.8	446.8	450.9	453.8	457.9	460.3	464.9	466.5	467.7
40°	393.8	381.5	370.0	361.4	355.6	355.2	355.2	356.4	360.6	365.9	370.8
42.5°	338.8	319.1	301.4	285.4	273.9	267.3	264.5	264.9	268.2	273.1	281.3
45°	294.8	270.2	248.0	228.7	213.1	202.9	197.9	197.5	200.0	205.7	214.8
47.5°	260.8	234.5	209.4	187.3	170.4	159.3	153.6	151.9	153.6	158.9	169.6
50°	232.4	205.3	179.5	156.5	138.4	126.9	121.6	119.5	121.6	126.1	136.7
52.5°	206.1	178.2	154.0	131.8	112.5	102.7	96.9	95.7	96.9	102.2	110.9
55°	175.8	151.9	128.1	105.9	89.1	79.3	74.7	73.5	74.7	79.7	88.7
57.5°	145.8	125.2	104.3	84.2	69.8	61.2	57.1	55.4	58.3	61.6	72.3
60°	117.9	101.4	83.8	66.1	54.2	46.4	43.1	42.7	43.5	47.6	55.0
62.5°	92.4	78.8	64.9	50.5	40.7	37.4	33.3	32.9	33.7	36.1	41.9
65°	66.5	57.9	47.2	37.0	29.2	24.6	23.0	23.4	24.2	25.9	31.2
67.5°	46.4	40.2	32.9	25.9	20.1	18.1	16.4	16.0	16.4	19.3	22.2
70°	31.2	27.5	22.2	19.7	14.0	11.1	11.5	10.3	11.9	11.9	14.4
72.5°	20.5	18.1	14.8	11.5	9.9	7.8	7.8	7.4	8.2	8.6	10.7
75°	10.7	8.2	8.2	5.7	4.1	2.0	3.7	3.3	2.9	3.3	4.1
77.5°	7.4	6.2	5.7	4.5	4.1	3.3	3.3	3.3	3.3	3.7	4.1
80°	4.5	4.5	3.3	2.9	2.5	2.0	2.5	2.5	2.5	2.5	2.9
82.5°	2.9	2.5	2.5	2.0	2.0	1.6	1.6	1.6	1.6	1.6	2.5
85°	2.5	1.6	1.6	1.2	1.6	2.9	1.2	1.6	1.6	1.6	1.2
87.5°	0.8	1.2	1.2	1.2	0.8	0.4	0.8	1.2	1.2	2.0	1.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0	765.0
2.5°	766.3	766.7	766.7	766.3	766.3	765.5	767.1	765.9	766.3	767.9	766.7
5°	767.1	767.5	767.5	767.1	767.1	767.1	767.5	767.5	767.1	766.7	767.5
7.5°	768.7	768.3	768.3	767.5	767.5	766.7	767.5	766.3	767.1	766.3	767.5
10°	766.7	767.1	766.7	766.3	766.3	765.9	765.9	764.6	765.0	763.8	764.6
12.5°	765.5	765.0	765.0	764.2	763.4	762.6	762.2	760.9	760.9	758.1	759.3
15°	762.2	762.6	761.4	759.7	758.9	756.8	756.0	754.4	752.7	750.7	751.1
17.5°	759.3	758.1	756.4	754.8	751.5	749.9	748.2	745.7	744.9	742.5	741.6
20°	750.7	749.9	747.8	744.9	742.9	739.2	737.5	735.1	733.0	730.6	729.3
22.5°	739.6	738.8	736.3	733.4	730.1	728.5	726.9	722.3	720.3	717.8	717.4
25°	725.6	724.4	721.9	718.6	717.0	712.5	710.8	707.6	706.7	704.3	703.9
27.5°	704.3	702.6	699.8	695.6	692.8	689.9	688.3	685.8	685.0	682.5	682.1
30°	672.2	670.2	664.4	662.8	657.9	655.0	655.0	651.7	652.1	650.5	650.5
32.5°	621.7	618.4	613.9	610.6	607.4	605.7	605.7	604.5	605.3	605.3	606.1
35°	554.8	550.3	547.8	545.8	545.8	547.4	552.3	553.6	556.0	558.1	559.7
37.5°	469.0	468.6	471.4	473.9	480.1	487.0	495.7	503.1	510.0	515.0	519.9
40°	376.2	386.4	394.6	406.1	415.6	429.1	444.7	457.5	469.4	478.0	487.0
42.5°	293.6	306.8	324.0	340.8	357.7	376.2	396.7	414.4	430.0	441.9	451.3
45°	228.7	246.8	267.8	289.1	310.9	333.9	355.2	373.3	389.7	402.0	411.5
47.5°	184.4	204.1	227.9	251.3	276.0	300.2	324.0	339.6	353.2	363.0	371.6
50°	152.3	173.3	198.3	225.0	249.7	273.9	294.4	309.6	320.7	329.3	334.7
52.5°	127.3	149.5	176.2	202.9	227.5	249.7	268.2	279.7	288.7	294.8	299.8
55°	105.1	126.5	151.5	176.6	200.8	221.8	236.9	245.6	252.5	256.2	259.1
57.5°	85.8	105.5	128.5	151.5	172.5	189.7	201.6	210.3	213.5	216.4	216.0
60°	67.4	85.8	106.8	126.5	144.6	158.5	167.1	172.1	174.5	175.8	174.9
62.5°	53.0	69.8	85.8	103.1	116.2	128.1	136.3	136.3	137.6	138.0	139.2
65°	39.4	52.1	66.1	78.8	89.5	97.3	101.8	103.1	104.7	104.3	103.5
67.5°	29.2	38.6	48.9	58.3	65.7	70.6	73.9	76.8	76.4	75.6	75.1
70°	20.1	26.3	35.3	41.1	46.4	51.3	52.1	52.6	53.0	53.4	52.6
72.5°	14.0	18.5	23.4	28.3	31.6	33.7	35.7	36.1	36.1	36.1	35.7
75°	7.0	9.4	14.0	16.0	18.9	19.7	21.4	21.4	22.6	20.9	20.5
77.5°	6.2	7.4	9.9	11.5	12.7	14.0	14.4	15.6	15.2	14.4	14.8
80°	3.7	4.5	6.2	7.0	8.6	9.0	9.4	9.9	9.4	9.9	9.9
82.5°	2.9	3.3	4.1	4.1	5.3	5.3	5.7	5.7	6.2	6.2	6.2
85°	1.6	2.9	2.5	4.9	3.3	3.3	4.1	4.9	4.1	4.1	4.9
87.5°	1.6	1.6	1.2	1.6	1.6	1.6	2.0	2.5	2.5	2.9	2.5
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):

	165°	170°	175°	180°
0°	765.0	765.0	765.0	765.0
2.5°	766.3	767.1	765.9	765.5
5°	767.5	767.5	766.7	766.7
7.5°	767.5	767.5	766.3	765.5
10°	764.2	764.2	763.0	762.2
12.5°	758.1	758.1	757.7	756.4
15°	750.3	750.3	748.6	747.4
17.5°	739.6	740.4	738.4	738.4
20°	728.1	727.7	726.0	725.2
22.5°	716.2	715.4	714.9	712.5
25°	703.5	702.6	701.4	700.2
27.5°	681.7	681.3	680.0	678.4
30°	648.4	648.0	646.4	646.4
32.5°	605.3	604.9	603.3	603.7
35°	560.5	562.2	561.4	559.7
37.5°	523.2	524.4	525.2	524.4
40°	492.0	495.7	496.1	496.9
42.5°	458.7	463.6	465.3	466.1
45°	418.9	423.4	427.1	426.3
47.5°	378.2	381.5	384.8	382.3
50°	339.2	341.3	342.5	342.5
52.5°	302.2	302.2	301.8	302.2
55°	259.9	259.9	258.3	259.1
57.5°	215.6	216.4	215.2	213.1
60°	174.5	172.5	171.7	170.4
62.5°	135.9	135.9	133.1	136.7
65°	101.8	100.6	99.4	99.0
67.5°	73.9	73.5	72.3	71.9
70°	52.1	50.5	50.1	49.3
72.5°	34.9	34.9	34.1	34.1
75°	21.4	19.3	18.9	19.3
77.5°	14.8	14.4	14.4	14.0
80°	9.9	9.4	10.3	9.0
82.5°	6.2	6.6	6.2	6.6
85°	4.1	4.9	4.5	4.5
87.5°	2.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)