

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: P246242

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246242
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 EC8B20930 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1816.0 lumens
Efficiency: N/A
Efficacy: 85.3 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

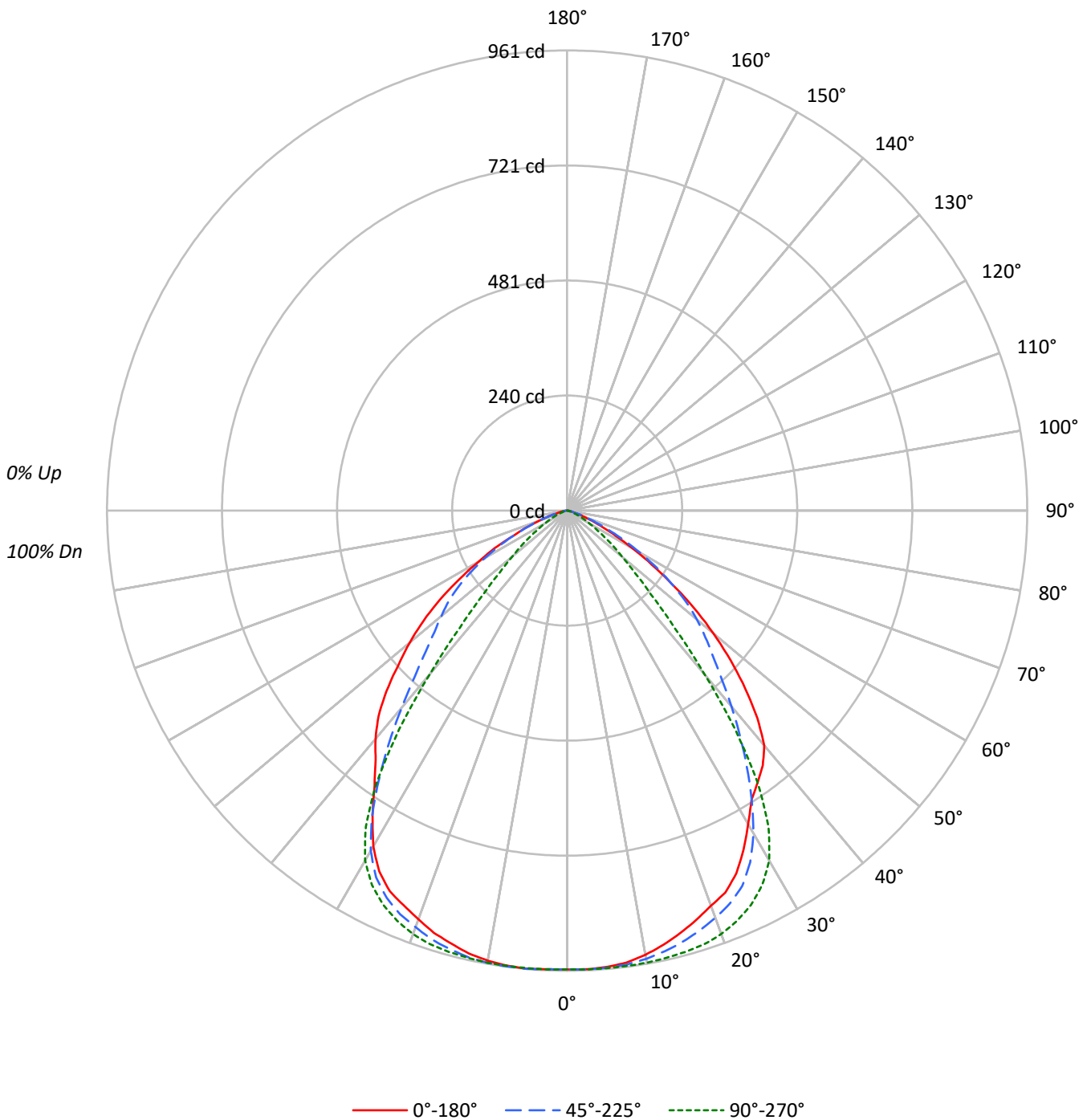
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	91.4	5.0
10°-20°	265.6	14.6
20°-30°	403.1	22.2
30°-40°	423.3	23.3
40°-50°	317.4	17.5
50°-60°	203.6	11.2
60°-70°	87.1	4.8
70°-80°	20.6	1.1
80°-90°	3.8	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°	760.1	41.9
0°-40°	1183.4	65.2
0°-60°	1704.5	93.9
0°-90°	1816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1816.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	958	958	958	958	958	
5°	957	958	959	961	960	91
15°	913	932	954	948	936	258
25°	836	865	909	892	877	382
35°	693	655	694	686	701	435
45°	527	430	247	418	534	403
55°	266	266	92	278	324	242
65°	80	95	29	122	124	86
75°	12	14	4	25	24	18
85°	4	3	2	4	6	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°	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1
2.5°	958.7	959.7	959.2	959.2	958.7	959.2	959.2	960.2	960.2	959.2	958.7
5°	956.7	957.7	957.7	956.7	956.7	959.2	957.7	958.7	958.7	958.1	958.1
7.5°	952.0	952.0	954.1	952.5	952.5	954.1	953.5	954.5	955.7	956.1	956.1
10°	941.8	942.8	943.2	943.2	943.8	945.3	946.3	948.4	949.4	950.5	950.9
12.5°	928.9	930.4	930.9	930.4	931.9	934.0	936.6	939.2	940.7	942.8	944.3
15°	913.4	913.4	914.4	916.0	917.0	920.1	922.7	925.7	929.9	932.4	935.0
17.5°	896.5	897.5	899.0	899.0	901.1	906.2	907.8	912.4	917.0	919.6	924.7
20°	878.0	879.0	880.5	881.6	884.1	888.2	891.3	895.5	900.6	905.2	910.4
22.5°	863.5	861.5	862.5	863.5	866.1	869.7	873.3	878.4	883.6	888.2	893.3
25°	835.7	836.3	837.8	838.8	842.0	845.0	849.2	855.3	859.9	865.1	870.7
27.5°	798.3	798.7	801.3	801.3	803.9	809.0	811.6	816.8	822.9	828.1	834.7
30°	755.6	756.6	756.6	758.6	760.2	762.7	765.3	770.5	773.5	778.2	787.4
32.5°	716.4	717.4	717.0	716.4	714.9	714.4	713.9	714.9	716.0	717.4	721.0
35°	693.3	690.8	688.6	685.0	681.0	675.9	671.1	665.0	659.4	654.7	649.6
37.5°	671.1	670.7	667.6	662.4	654.2	644.9	634.1	620.8	607.4	593.0	579.1
40°	640.3	638.7	636.2	629.0	619.8	608.5	594.0	577.5	556.0	533.8	511.2
42.5°	587.9	588.4	585.3	579.7	570.9	560.1	545.1	527.2	504.0	477.8	448.5
45°	526.6	526.6	525.6	521.0	514.9	506.1	494.8	479.9	457.3	430.5	399.1
47.5°	462.9	463.4	461.9	460.8	458.3	452.5	444.4	433.0	417.1	391.3	360.1
50°	398.1	398.1	400.6	400.1	400.1	398.1	394.5	387.8	373.9	353.3	324.0
52.5°	333.3	334.3	335.9	337.9	340.4	344.6	340.4	337.4	328.7	312.6	287.5
55°	266.5	267.5	270.0	273.6	276.7	280.8	281.8	281.8	277.2	266.5	247.4
57.5°	209.3	207.8	209.9	212.9	217.0	221.2	224.2	227.8	227.3	220.2	204.7
60°	157.4	157.9	159.4	162.5	165.6	169.2	173.3	176.4	177.9	174.3	164.6
62.5°	114.7	114.7	116.7	119.8	121.4	126.6	129.1	130.6	132.2	131.6	125.4
65°	80.3	81.3	82.3	83.9	85.4	88.4	90.0	93.0	94.2	94.6	90.0
67.5°	56.6	55.0	56.0	57.1	58.6	60.6	63.8	63.8	65.4	65.4	62.2
70°	36.0	36.0	36.5	38.0	39.1	39.6	40.6	41.7	43.2	42.7	42.7
72.5°	24.2	23.7	24.2	24.7	25.2	26.8	26.8	27.2	28.2	28.8	26.8
75°	12.3	12.9	13.9	13.3	14.9	13.9	14.3	15.9	15.5	14.3	14.3
77.5°	10.3	10.3	10.3	9.8	10.8	10.8	10.3	11.3	10.8	10.8	10.3
80°	7.2	7.7	7.2	6.7	7.2	6.7	6.7	6.7	6.7	6.7	6.2
82.5°	5.7	4.6	5.2	4.6	5.2	5.2	4.6	4.1	4.1	4.6	4.1
85°	4.1	3.1	3.6	3.6	3.1	3.1	3.1	3.1	3.1	2.6	2.6
87.5°	2.6	1.6	1.6	1.6	2.0	2.0	2.0	1.6	2.0	2.0	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°	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1
2.5°	959.7	959.2	960.2	959.7	959.7	959.2	959.7	959.2	960.2	958.1	958.7
5°	959.7	958.7	959.2	959.7	960.2	959.2	959.2	959.2	960.2	959.2	959.7
7.5°	957.7	957.1	958.7	959.7	959.2	958.7	959.7	959.2	960.2	959.7	960.7
10°	953.5	954.1	955.1	956.7	957.1	957.7	958.7	958.7	960.2	958.1	959.2
12.5°	947.4	949.4	952.0	953.1	955.1	955.1	956.1	956.7	957.7	957.1	958.7
15°	939.6	942.2	945.3	947.9	950.5	952.0	953.5	954.1	955.7	954.1	954.5
17.5°	930.4	933.5	938.1	941.2	945.3	946.9	948.9	949.9	951.5	950.5	950.9
20°	917.5	921.1	926.3	930.9	933.5	937.0	939.6	941.2	942.2	941.2	941.8
22.5°	899.5	904.6	911.4	915.0	920.1	923.1	923.7	927.3	929.9	927.3	928.3
25°	878.4	883.6	888.7	896.5	901.1	904.6	908.2	908.8	911.4	910.8	910.4
27.5°	843.4	850.2	858.9	865.1	871.2	877.0	881.0	882.0	884.6	883.6	884.1
30°	795.7	802.9	811.0	820.8	829.5	835.3	840.4	844.0	846.6	845.0	844.4
32.5°	727.8	734.9	743.7	753.4	763.7	772.0	778.2	782.8	785.8	784.8	782.2
35°	650.1	652.2	657.8	665.5	674.3	683.0	688.6	693.8	697.4	698.4	698.4
37.5°	570.4	563.8	559.6	559.6	564.8	568.3	573.5	576.5	582.2	584.3	585.8
40°	493.2	477.8	463.4	452.5	445.4	444.9	444.9	446.4	451.5	458.3	464.4
42.5°	424.3	399.6	377.6	357.5	343.0	334.8	331.3	331.7	335.9	342.0	352.3
45°	369.3	338.4	310.6	286.5	266.9	254.0	247.9	247.4	250.4	257.7	269.0
47.5°	326.5	293.7	262.3	234.5	213.4	199.5	192.4	190.3	192.4	199.1	212.4
50°	291.1	257.2	224.8	196.0	173.3	159.0	152.2	149.7	152.2	157.9	171.3
52.5°	258.2	223.2	192.9	165.1	140.9	128.6	121.4	119.8	121.4	128.0	138.9
55°	220.2	190.3	160.4	132.7	111.7	99.3	93.6	92.0	93.6	99.8	111.1
57.5°	182.6	156.8	130.6	105.5	87.4	76.7	71.5	69.4	73.0	77.1	90.5
60°	147.6	127.0	104.9	82.8	67.9	58.1	54.0	53.5	54.5	59.6	68.9
62.5°	115.7	98.8	81.3	63.2	50.9	46.7	41.7	41.1	42.1	45.3	52.5
65°	83.3	72.5	59.2	46.3	36.5	30.8	28.8	29.4	30.4	32.4	39.1
67.5°	58.1	50.4	41.1	32.4	25.2	22.6	20.6	20.1	20.6	24.2	27.8
70°	39.1	34.4	27.8	24.7	17.5	13.9	14.3	12.9	14.9	14.9	18.0
72.5°	25.7	22.6	18.5	14.3	12.3	9.8	9.8	9.3	10.3	10.8	13.3
75°	13.3	10.3	10.3	7.2	5.2	2.6	4.6	4.1	3.6	4.1	5.2
77.5°	9.3	7.7	7.2	5.7	5.2	4.1	4.1	4.1	4.1	4.6	5.2
80°	5.7	5.7	4.1	3.6	3.1	2.6	3.1	3.1	3.1	3.1	3.6
82.5°	3.6	3.1	3.1	2.6	2.6	2.0	2.0	2.0	2.0	2.0	3.1
85°	3.1	2.0	2.0	1.6	2.0	3.6	1.6	2.0	2.0	2.0	1.6
87.5°	1.0	1.6	1.6	1.6	1.0	0.6	1.0	1.6	1.6	2.6	2.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1	958.1
2.5°	959.7	960.2	960.2	959.7	959.7	958.7	960.7	959.2	959.7	961.8	960.2
5°	960.7	961.3	961.3	960.7	960.7	960.7	961.3	961.3	960.7	960.2	961.3
7.5°	962.8	962.3	962.3	961.3	961.3	960.2	961.3	959.7	960.7	959.7	961.3
10°	960.2	960.7	960.2	959.7	959.7	959.2	959.2	957.7	958.1	956.7	957.7
12.5°	958.7	958.1	958.1	957.1	956.1	955.1	954.5	953.1	953.1	949.4	950.9
15°	954.5	955.1	953.5	951.5	950.5	947.9	946.9	944.8	942.8	940.2	940.7
17.5°	950.9	949.4	947.4	945.3	941.2	939.2	937.0	934.0	933.0	929.9	928.9
20°	940.2	939.2	936.6	933.0	930.4	925.7	923.7	920.7	918.1	915.0	913.4
22.5°	926.3	925.3	922.1	918.5	914.4	912.4	910.4	904.6	902.1	899.0	898.5
25°	908.8	907.2	904.2	900.1	898.0	892.3	890.3	886.2	885.1	882.0	881.6
27.5°	882.0	880.0	876.4	871.2	867.7	864.1	862.0	858.9	857.9	854.8	854.3
30°	842.0	839.4	832.1	830.1	823.9	820.3	820.3	816.2	816.8	814.6	814.6
32.5°	778.6	774.6	768.9	764.7	760.7	758.6	758.6	757.1	758.1	758.1	759.1
35°	694.8	689.2	686.1	683.5	683.5	685.6	691.8	693.3	696.4	698.9	701.0
37.5°	587.3	586.8	590.4	593.6	601.2	609.9	620.8	630.0	638.7	644.9	651.1
40°	471.2	483.9	494.2	508.7	520.5	537.4	557.0	572.9	587.9	598.6	609.9
42.5°	367.7	384.2	405.8	426.9	448.0	471.2	496.8	518.9	538.5	553.4	565.2
45°	286.5	309.1	335.3	362.1	389.3	418.1	444.9	467.5	488.1	503.6	515.3
47.5°	230.9	255.6	285.4	314.8	345.6	376.0	405.8	425.3	442.3	454.7	465.4
50°	190.8	217.0	248.4	281.8	312.6	343.0	368.8	387.8	401.7	412.5	419.1
52.5°	159.4	187.2	220.6	254.0	285.0	312.6	335.9	350.2	361.5	369.3	375.4
55°	131.6	158.4	189.8	221.2	251.6	277.7	296.7	307.6	316.3	320.9	324.5
57.5°	107.5	132.2	161.0	189.8	216.0	237.7	252.6	263.3	267.5	271.1	270.5
60°	84.3	107.5	133.7	158.4	181.0	198.5	209.3	215.5	218.6	220.2	219.0
62.5°	66.4	87.4	107.5	129.1	145.5	160.4	170.7	170.7	172.3	172.9	174.3
65°	49.3	65.4	82.8	98.8	112.1	121.9	127.6	129.1	131.2	130.6	129.6
67.5°	36.5	48.3	61.2	73.0	82.3	88.4	92.6	96.2	95.6	94.6	94.2
70°	25.2	33.0	44.3	51.5	58.1	64.3	65.4	65.8	66.4	66.8	65.8
72.5°	17.5	23.1	29.4	35.5	39.6	42.1	44.7	45.3	45.3	45.3	44.7
75°	8.7	11.9	17.5	20.1	23.7	24.7	26.8	26.8	28.2	26.2	25.7
77.5°	7.7	9.3	12.3	14.3	15.9	17.5	18.0	19.5	19.1	18.0	18.5
80°	4.6	5.7	7.7	8.7	10.8	11.3	11.9	12.3	11.9	12.3	12.3
82.5°	3.6	4.1	5.2	5.2	6.7	6.7	7.2	7.2	7.7	7.7	7.7
85°	2.0	3.6	3.1	6.2	4.1	4.1	5.2	6.2	5.2	5.2	6.2
87.5°	2.0	2.0	1.6	2.0	2.0	2.0	2.6	3.1	3.1	3.6	3.1
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°	958.1	958.1	958.1	958.1
2.5°	959.7	960.7	959.2	958.7
5°	961.3	961.3	960.2	960.2
7.5°	961.3	961.3	959.7	958.7
10°	957.1	957.1	955.7	954.5
12.5°	949.4	949.4	948.9	947.4
15°	939.6	939.6	937.6	936.0
17.5°	926.3	927.3	924.7	924.7
20°	911.9	911.4	909.4	908.2
22.5°	897.0	895.9	895.5	892.3
25°	881.0	880.0	878.4	877.0
27.5°	853.8	853.3	851.7	849.6
30°	812.1	811.6	809.6	809.6
32.5°	758.1	757.6	755.6	756.0
35°	702.1	704.1	703.1	701.0
37.5°	655.2	656.8	657.8	656.8
40°	616.1	620.8	621.3	622.4
42.5°	574.5	580.7	582.7	583.7
45°	524.6	530.2	534.9	533.8
47.5°	473.7	477.8	481.9	478.8
50°	424.9	427.4	428.9	428.9
52.5°	378.6	378.6	378.0	378.6
55°	325.5	325.5	323.5	324.5
57.5°	270.0	271.1	269.5	266.9
60°	218.6	216.0	215.0	213.4
62.5°	170.3	170.3	166.7	171.3
65°	127.6	126.0	124.4	124.0
67.5°	92.6	92.0	90.5	90.0
70°	65.4	63.2	62.8	61.8
72.5°	43.7	43.7	42.7	42.7
75°	26.8	24.2	23.7	24.2
77.5°	18.5	18.0	18.0	17.5
80°	12.3	11.9	12.9	11.3
82.5°	7.7	8.2	7.7	8.2
85°	5.2	6.2	5.7	5.7
87.5°	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)