

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: P244226

Luminaire Tested: **LSR8B20D010 EC8B209730 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244226
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 EC8B209730 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1698.0 lumens
Efficiency: N/A
Efficacy: 79.7 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

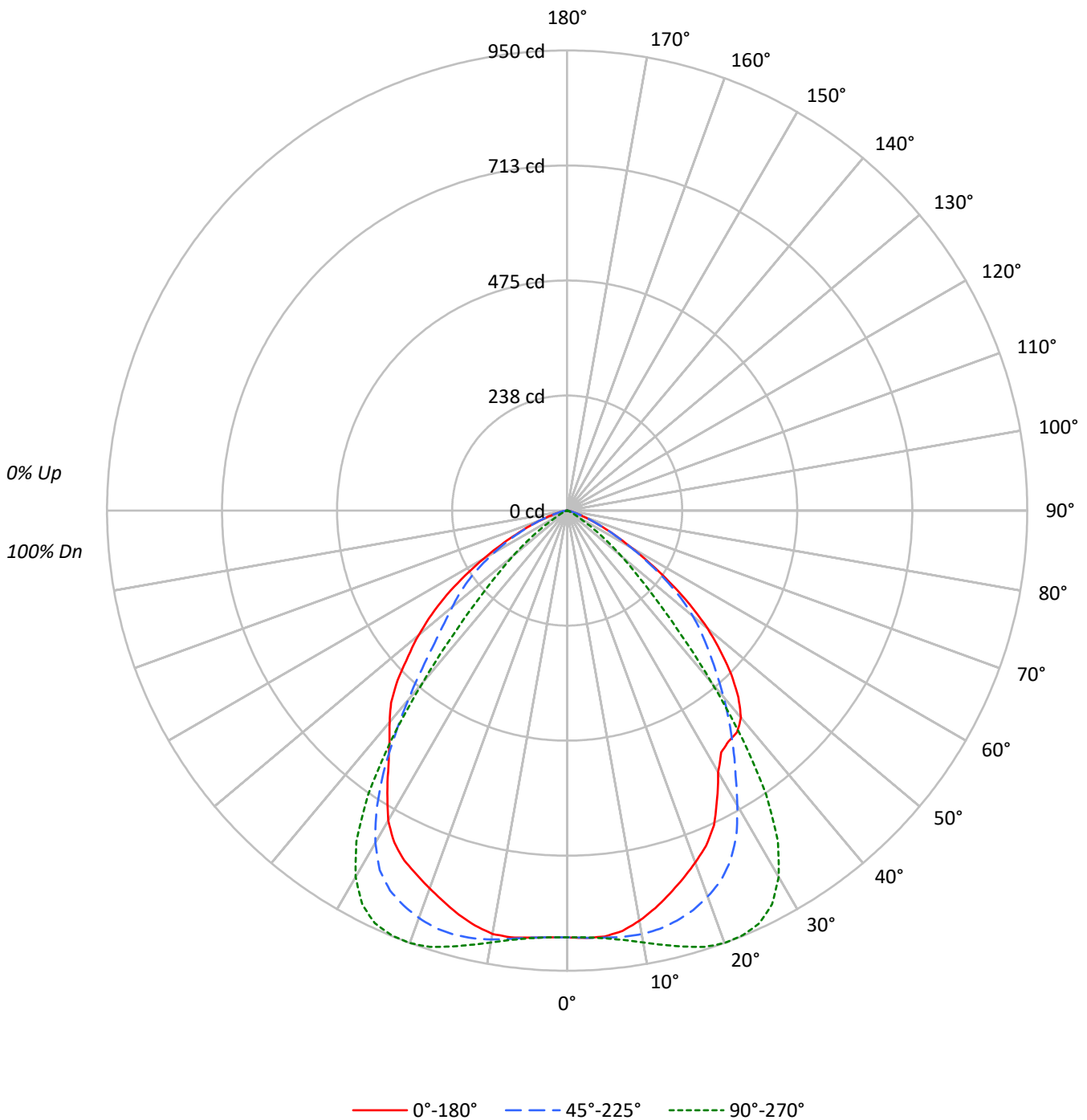
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	74	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°	84.7	5.0
10°-20°	250.9	14.8
20°-30°	382.8	22.5
30°-40°	399.5	23.5
40°-50°	300.1	17.7
50°-60°	184.6	10.9
60°-70°	75.1	4.4
70°-80°	17.7	1.0
80°-90°	2.4	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°	718.5	42.3
0°-40°	1118.0	65.8
0°-60°	1602.7	94.4
0°-90°	1698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	881	881	881	881	881	
5°	883	885	886	885	885	84
15°	819	876	932	906	864	231
25°	717	798	940	865	797	326
35°	581	598	716	662	643	367
45°	480	415	259	387	495	366
55°	259	246	68	246	303	233
65°	81	82	10	110	116	84
75°	14	14	2	25	26	17
85°	1	1	0	3	4	2
90°	0	0	0	0	0	



TEST NUMBER: P244226

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9
2.5°	883.2	881.8	883.2	883.2	883.7	882.7	883.2	883.7	882.7	882.7	882.7
5°	882.7	881.8	882.7	882.3	883.2	883.2	884.1	884.1	885.1	885.1	886.5
7.5°	875.3	873.4	875.3	876.7	877.6	879.5	881.8	883.7	885.5	887.4	889.8
10°	859.8	859.8	861.2	864.0	866.8	870.1	874.3	879.0	883.7	887.9	892.1
12.5°	840.7	839.3	842.1	845.8	850.0	855.2	861.7	868.7	876.2	884.6	891.2
15°	818.7	817.3	820.5	824.3	829.4	836.9	844.9	854.2	865.0	876.2	886.9
17.5°	796.2	795.8	799.0	804.2	808.4	816.3	826.6	837.8	850.0	865.0	879.0
20°	773.3	772.9	776.1	780.3	786.0	793.4	803.7	816.8	831.3	848.1	864.5
22.5°	749.5	750.0	752.8	757.4	762.1	770.1	780.8	793.9	809.8	828.0	846.3
25°	717.2	714.9	718.6	723.3	731.2	737.8	748.1	762.1	778.5	797.6	819.2
27.5°	670.5	670.0	673.3	677.5	684.5	692.4	703.7	718.2	735.5	756.5	777.5
30°	623.7	624.6	626.1	630.3	634.9	642.9	654.1	666.3	682.6	702.7	725.2
32.5°	591.9	591.9	593.8	596.6	599.9	604.1	612.0	620.9	633.5	647.6	663.9
35°	581.2	579.3	581.2	581.6	582.1	583.0	584.4	587.2	591.4	597.5	603.6
37.5°	576.5	575.1	575.1	573.2	570.9	568.1	564.3	560.1	555.5	549.4	544.7
40°	558.3	557.3	556.4	554.5	549.4	543.8	537.7	527.9	517.1	502.1	487.2
42.5°	523.2	522.3	521.8	518.0	513.4	506.8	499.8	489.5	476.0	456.8	435.3
45°	479.7	477.8	476.4	473.2	469.9	464.3	457.7	448.4	434.8	415.2	389.5
47.5°	429.2	428.3	427.8	426.4	423.1	419.9	415.7	408.2	396.0	377.3	350.7
50°	378.2	376.4	377.3	376.9	375.4	373.1	370.3	365.2	355.8	339.0	314.7
52.5°	319.8	319.8	319.3	320.7	321.2	320.7	321.2	315.6	307.7	295.0	274.5
55°	259.0	259.0	260.4	262.3	264.2	264.6	264.2	261.8	256.2	245.9	227.7
57.5°	202.0	201.1	203.9	206.7	208.5	210.4	209.0	207.1	203.9	195.4	181.4
60°	153.8	153.8	155.7	157.6	159.4	161.3	160.8	160.4	157.6	151.9	140.7
62.5°	113.1	113.6	113.6	115.0	116.9	118.8	120.2	118.8	117.4	113.6	106.1
65°	80.9	80.4	80.9	82.3	83.7	85.6	86.5	86.0	84.6	81.8	76.2
67.5°	54.2	53.8	55.6	56.1	57.0	58.9	58.4	58.9	58.4	56.1	51.4
70°	35.5	34.6	35.5	35.1	36.5	36.9	37.9	38.3	37.9	36.5	35.1
72.5°	22.0	21.5	22.0	22.4	22.9	23.4	24.3	24.3	23.8	22.9	21.0
75°	14.0	12.6	13.1	12.2	13.1	13.1	14.0	14.5	14.0	14.0	13.1
77.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.9	9.3	8.4	8.0
80°	4.2	4.2	4.7	4.7	4.7	5.1	4.7	4.7	4.7	5.1	3.7
82.5°	3.3	2.8	2.8	2.8	3.3	2.8	2.8	2.8	2.8	2.8	2.8
85°	1.4	1.9	1.4	0.9	1.4	1.4	1.9	1.4	1.4	1.4	1.9
87.5°	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.9	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°	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9
2.5°	883.2	882.3	882.3	881.8	882.7	881.8	882.3	881.8	881.8	882.7	881.8
5°	886.5	886.9	886.0	885.5	886.9	886.9	886.9	886.0	886.0	886.5	886.0
7.5°	891.2	892.1	892.6	893.0	894.0	894.4	894.4	894.0	893.5	894.9	893.0
10°	896.3	897.7	900.5	901.9	904.2	904.2	905.2	905.2	904.2	905.2	904.7
12.5°	894.4	902.8	907.5	910.8	914.1	916.9	917.8	918.3	917.8	919.7	917.8
15°	897.7	904.7	912.2	917.8	923.9	927.1	928.1	931.8	932.8	933.2	930.4
17.5°	892.6	905.2	913.1	921.5	930.4	936.5	942.1	944.5	944.9	945.9	942.1
20°	880.9	894.9	907.0	919.2	929.5	938.8	943.5	950.1	948.2	951.9	946.8
22.5°	865.0	880.9	896.3	912.2	923.0	934.2	944.0	948.7	951.0	951.0	945.4
25°	839.7	858.4	875.3	891.6	908.0	921.5	932.8	939.8	941.2	940.7	934.2
27.5°	800.4	820.5	840.2	858.9	879.0	894.9	908.0	916.4	918.7	918.7	911.7
30°	746.2	767.7	786.9	809.3	829.9	847.7	865.9	873.4	877.6	877.6	869.7
32.5°	681.7	699.9	717.7	739.7	762.1	782.2	799.5	809.8	814.9	814.5	807.5
35°	611.6	620.4	634.0	650.4	670.5	689.2	706.0	715.8	724.7	724.2	717.7
37.5°	541.4	539.1	540.5	546.6	559.2	572.3	585.4	594.7	602.2	605.5	604.1
40°	472.7	460.5	448.8	444.6	445.6	450.3	457.3	464.3	472.7	476.9	478.8
42.5°	411.0	390.4	369.8	354.4	345.5	342.7	346.0	348.3	353.5	359.5	365.6
45°	361.4	333.8	306.7	282.9	267.9	259.0	257.2	259.0	261.8	267.9	275.9
47.5°	320.7	288.5	258.1	231.4	209.5	197.8	194.5	193.6	196.4	202.0	212.7
50°	284.7	252.5	218.8	188.0	165.0	151.9	147.3	145.4	148.7	152.9	162.7
52.5°	245.5	213.7	179.1	149.1	125.3	111.7	106.6	103.8	105.7	111.3	121.1
55°	202.9	173.5	142.1	111.3	88.4	75.7	69.7	67.8	69.7	75.7	85.6
57.5°	160.4	135.6	109.4	80.4	59.8	47.2	41.1	39.3	44.4	46.8	57.0
60°	125.3	105.2	82.8	58.9	41.1	31.3	25.2	23.8	26.2	30.4	38.8
62.5°	94.0	81.4	63.6	42.1	30.4	20.1	16.8	15.4	16.8	20.1	26.7
65°	68.3	58.4	44.4	30.9	20.6	15.0	11.2	10.3	11.7	14.0	19.6
67.5°	46.8	39.3	30.9	21.5	14.0	9.3	8.0	8.0	8.4	10.3	14.5
70°	30.4	25.7	19.6	14.0	9.3	7.0	6.1	5.1	6.1	7.5	9.8
72.5°	19.2	16.4	12.6	9.8	7.0	5.1	4.2	3.7	4.7	5.6	7.5
75°	11.7	8.9	6.5	5.1	3.7	3.7	3.7	1.9	2.3	3.7	4.7
77.5°	7.0	6.1	5.1	4.2	3.3	1.9	1.9	1.9	2.3	2.8	4.2
80°	3.7	3.3	2.3	2.3	1.9	1.4	1.9	1.4	0.9	2.3	2.8
82.5°	2.3	1.9	1.9	1.9	2.3	0.9	1.4	0.9	1.4	1.9	1.4
85°	1.4	1.4	1.4	0.9	2.3	0.9	0.9	0.5	0.5	0.9	0.9
87.5°	0.0	0.5	0.5	0.0	0.5	0.0	0.5	0.5	0.5	0.5	0.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9	880.9
2.5°	882.3	881.8	882.3	881.8	881.8	881.8	882.3	882.3	881.8	881.8	882.7
5°	886.0	886.0	886.0	885.5	885.1	885.1	886.0	886.0	884.6	886.0	886.0
7.5°	894.0	892.6	894.0	892.1	891.2	891.6	892.1	891.2	890.2	890.7	890.7
10°	904.2	902.8	902.8	901.4	900.0	899.1	898.2	895.8	893.5	893.0	891.2
12.5°	916.4	914.1	912.7	909.9	907.5	904.2	901.4	897.7	893.0	889.8	886.5
15°	928.6	924.8	921.5	916.9	911.7	906.1	900.0	894.0	886.5	879.9	874.3
17.5°	938.4	933.2	927.1	919.7	912.2	903.8	894.9	886.0	875.3	866.8	860.3
20°	941.6	934.2	926.2	916.4	906.6	894.9	883.7	872.0	859.8	850.9	843.5
22.5°	937.4	928.6	918.7	908.5	895.4	882.7	869.7	856.1	845.3	833.2	826.2
25°	925.8	915.0	904.2	892.1	879.5	865.4	851.4	837.4	824.3	817.7	808.9
27.5°	901.9	890.2	878.5	865.9	851.4	837.4	822.9	809.3	798.1	789.2	784.1
30°	859.8	846.3	832.7	819.2	806.5	792.0	778.5	767.2	756.0	749.0	743.9
32.5°	795.3	783.2	769.6	756.5	744.8	732.7	721.4	711.6	703.7	699.0	695.2
35°	708.3	696.2	685.9	676.6	666.7	661.6	654.6	649.0	645.7	643.8	643.4
37.5°	598.9	591.9	588.6	586.8	584.9	583.5	584.4	586.8	588.6	591.9	595.7
40°	482.0	488.1	490.0	496.5	502.6	510.6	519.5	529.7	538.1	548.9	556.4
42.5°	375.4	386.7	399.8	413.8	428.7	443.2	461.0	477.4	492.3	505.9	517.6
45°	288.5	305.8	325.4	345.5	365.6	386.7	408.2	428.3	446.0	460.5	472.7
47.5°	224.9	244.1	269.3	294.1	318.4	343.2	367.0	388.1	403.0	417.1	427.8
50°	178.1	200.1	227.7	256.2	282.9	309.0	334.3	353.9	368.9	380.1	388.1
52.5°	137.9	164.1	192.2	222.1	250.6	279.1	302.5	320.7	332.9	342.7	348.8
55°	102.9	128.6	158.5	189.4	218.3	245.9	267.9	283.8	294.6	300.2	303.4
57.5°	74.3	97.7	127.6	158.5	184.7	210.9	228.6	243.1	249.2	252.5	253.9
60°	54.2	75.7	102.4	129.0	153.8	174.9	190.3	200.1	204.8	206.7	206.2
62.5°	39.7	58.4	81.4	103.8	123.9	141.2	153.4	159.9	162.2	163.2	161.8
65°	30.4	44.9	64.5	81.8	97.3	109.9	118.8	123.0	124.4	123.9	123.0
67.5°	22.4	33.7	48.2	61.3	72.5	82.3	87.0	90.7	91.6	90.2	88.8
70°	15.9	24.8	35.1	44.0	52.4	58.0	63.1	63.6	63.6	63.1	62.2
72.5°	11.2	17.3	23.8	29.9	35.1	39.3	41.1	42.5	42.1	41.6	40.7
75°	7.5	10.8	17.3	18.7	23.4	24.8	26.7	26.7	27.1	25.7	25.7
77.5°	4.7	7.5	10.3	12.2	14.0	15.9	16.8	16.8	17.3	16.8	16.8
80°	2.8	4.7	5.6	8.4	8.4	9.8	10.3	10.8	9.8	11.2	9.8
82.5°	1.9	2.8	4.2	4.2	5.1	6.1	6.1	6.5	6.5	6.1	6.1
85°	1.4	1.9	2.3	2.8	2.8	3.3	2.8	2.8	3.3	3.7	3.3
87.5°	0.5	0.9	0.5	0.9	0.9	1.9	1.4	1.4	1.4	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°	880.9	880.9	880.9	880.9
2.5°	881.8	882.3	881.8	881.8
5°	886.0	885.5	886.0	885.1
7.5°	889.3	889.3	888.8	888.8
10°	889.3	887.4	887.4	887.4
12.5°	882.3	879.9	878.5	877.6
15°	870.1	865.9	864.0	863.6
17.5°	854.2	850.5	848.1	846.7
20°	836.0	832.2	829.4	829.9
22.5°	820.1	815.9	814.0	813.1
25°	804.2	799.0	797.6	796.7
27.5°	778.5	775.7	774.3	772.9
30°	739.2	737.8	735.5	738.7
32.5°	693.8	691.5	689.6	691.0
35°	643.8	642.4	643.8	642.9
37.5°	598.0	599.4	601.3	602.2
40°	562.0	567.1	569.0	569.9
42.5°	526.0	532.1	535.8	538.1
45°	481.6	487.7	491.9	494.7
47.5°	435.8	440.9	445.1	444.6
50°	394.1	397.0	398.8	400.7
52.5°	352.1	352.1	352.5	352.5
55°	304.4	303.4	303.0	303.4
57.5°	252.0	251.1	250.6	249.2
60°	204.3	201.5	199.6	199.6
62.5°	159.9	156.6	155.2	154.8
65°	120.2	119.7	116.9	116.4
67.5°	87.0	85.1	83.2	83.7
70°	61.3	58.4	58.4	57.5
72.5°	39.7	38.3	37.9	37.9
75°	24.8	24.8	23.8	25.7
77.5°	16.4	16.4	15.9	16.4
80°	9.8	9.8	9.8	9.3
82.5°	6.1	6.5	6.1	6.1
85°	3.3	3.7	2.8	4.2
87.5°	1.9	2.3	1.9	2.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)