

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: McGRAW-EDISON

Report Number: P299636

Luminaire Tested: **GLNA-AF-01-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299636
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-5MQ-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5098.8 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 44
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

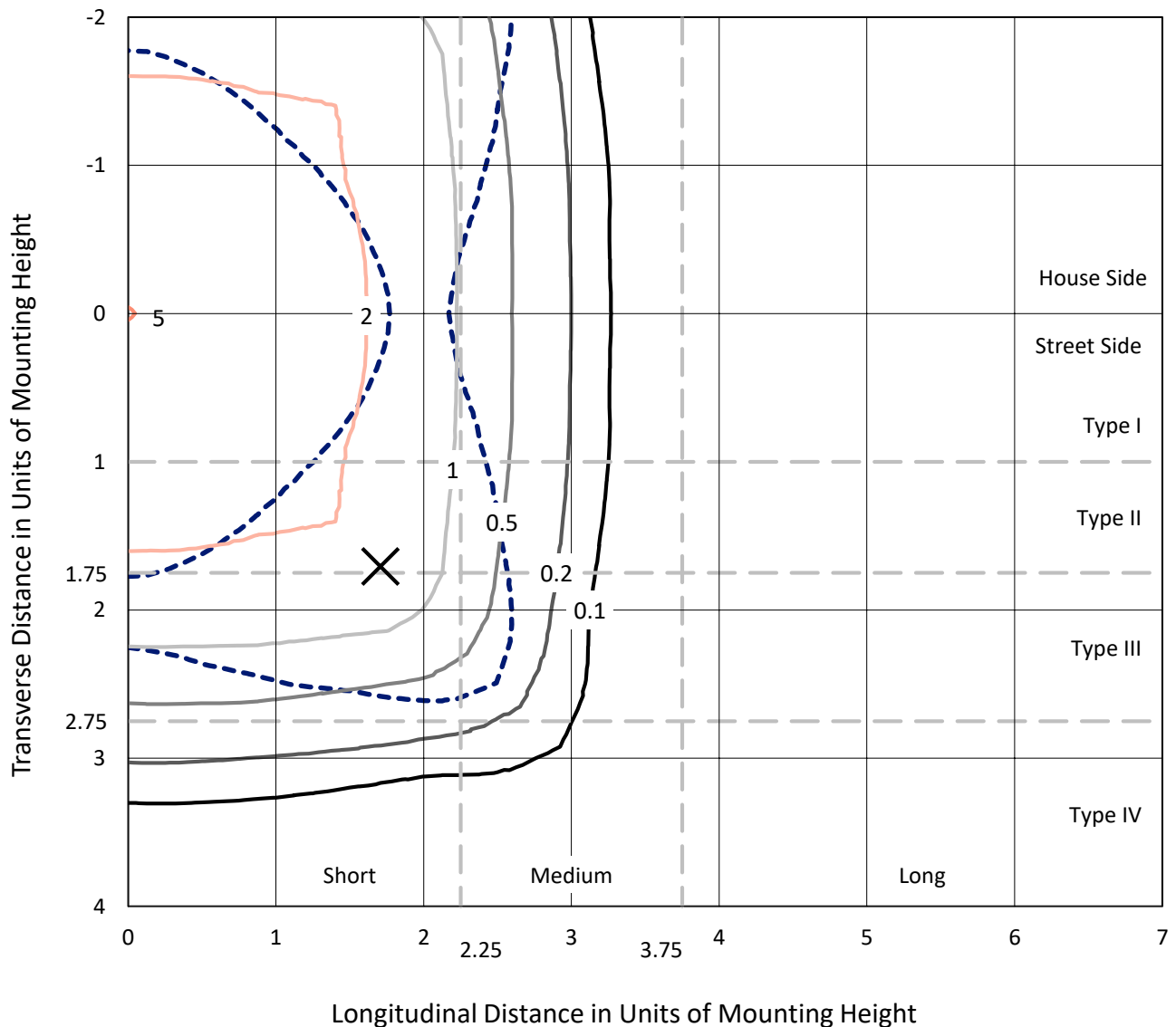


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

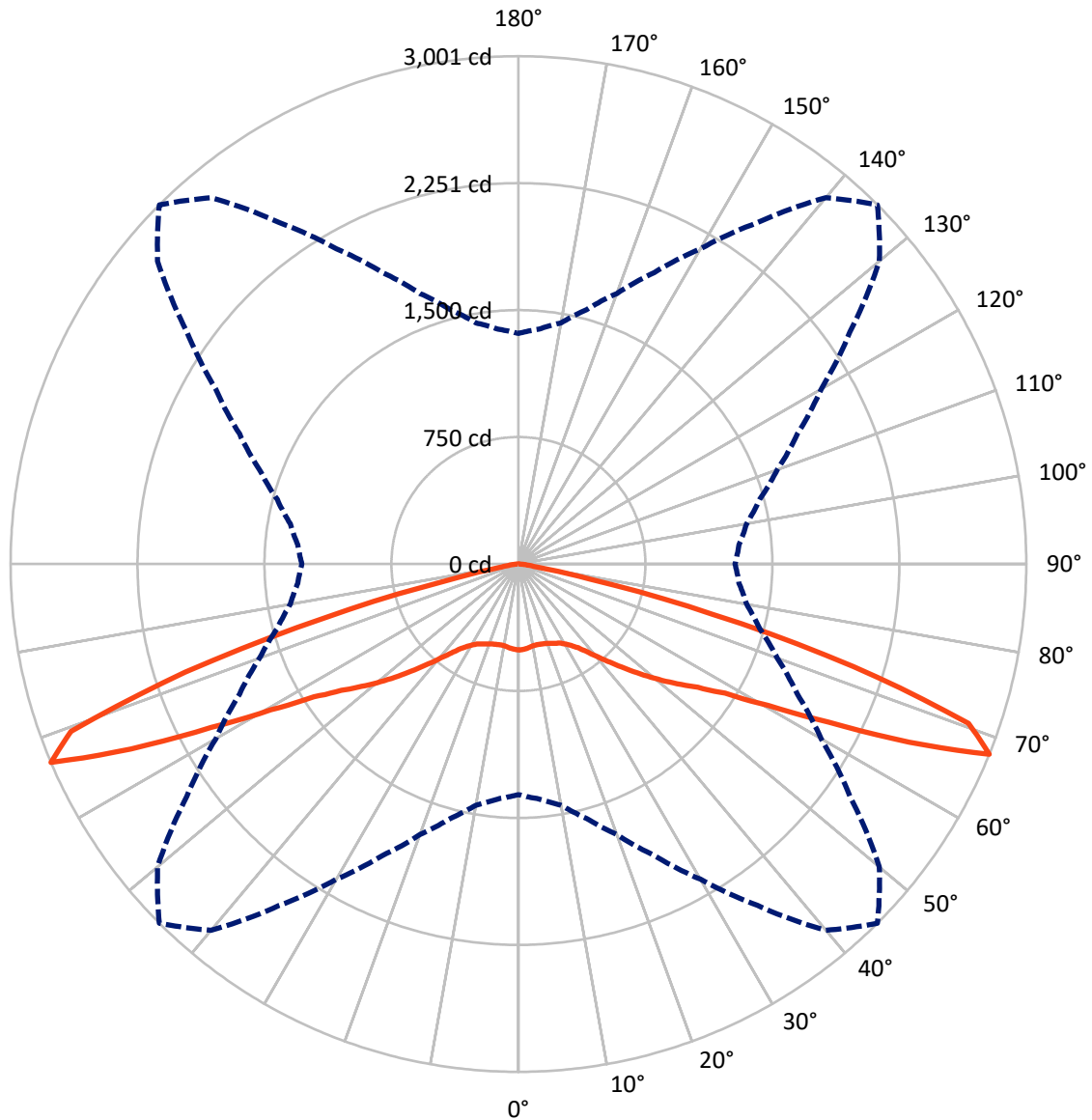


Based on 10 foot mounting height. Maximum calculated value = 5.1 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2549.4	0.0	2549.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2549.4	0.0	2549.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	5098.8	0.0	5098.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	0.9
10°-20°	138.0	2.7
20°-30°	234.6	4.6
30°-40°	383.5	7.5
40°-50°	684.6	13.4
50°-60°	1154.3	22.6
60°-70°	1791.3	35.1
70°-80°	629.4	12.3
80°-90°	35.6	0.7
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°-90°	5098.8	100.0
0°-180°	5098.8	100.0



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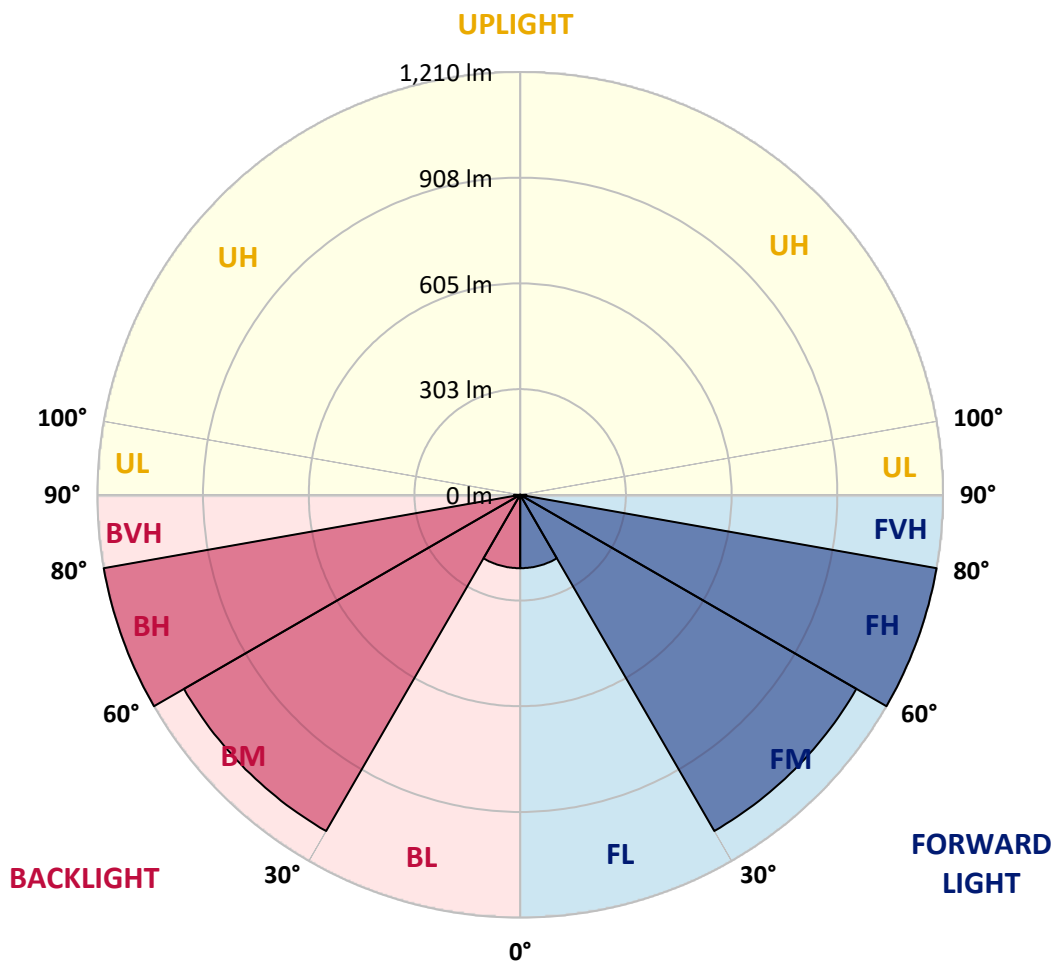
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	210.1	4.1			
FM (30°-60°)	1111.2	21.8			
FH (60°-80°)	1210.3	23.7			G1/1800
FVH (80°-90°)	17.8	0.3			G1/100
BL (0°-30°)	210.1	4.1	B1/500		
BM (30°-60°)	1111.2	21.8	B2/2500		
BH (60°-80°)	1210.3	23.7	B3/2500		G1/1800
BVH (80°-90°)	17.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1
2.5°	506.2	506.7	506.7	506.7	506.5	506.5	506.0	506.5	506.2	505.5	505.8
5°	502.0	502.5	502.5	502.3	503.0	502.7	502.0	502.5	502.3	501.8	502.0
7.5°	495.9	496.6	496.6	496.4	497.1	496.9	496.4	496.6	496.6	495.9	495.9
10°	489.1	489.6	489.6	489.4	490.5	490.5	490.3	491.0	491.2	490.5	490.1
12.5°	482.8	483.5	483.5	484.4	485.6	486.1	487.2	488.2	489.1	488.9	488.0
15°	479.0	479.5	480.4	481.6	483.5	485.1	487.0	489.1	491.0	491.5	490.1
17.5°	476.7	477.4	478.8	480.4	483.0	485.8	488.7	491.5	494.0	495.0	493.3
20°	476.0	476.5	477.9	480.7	484.2	488.4	492.4	495.7	499.2	500.4	499.2
22.5°	477.4	478.3	480.0	483.3	488.0	493.3	498.0	502.5	506.9	509.1	507.4
25°	483.7	484.7	486.8	491.0	496.2	501.8	507.2	512.3	516.3	518.4	517.3
27.5°	495.5	496.6	499.2	503.4	509.1	515.2	521.0	525.2	528.5	529.2	527.8
30°	513.0	515.6	518.7	523.4	529.9	535.1	540.9	544.7	548.7	548.7	547.5
32.5°	540.5	543.1	546.3	550.8	555.9	561.6	566.7	570.0	574.2	574.5	571.7
35°	581.5	582.7	585.5	588.3	593.0	597.9	602.4	604.5	608.0	608.2	605.7
37.5°	635.7	635.9	637.8	638.7	642.9	648.3	652.6	654.0	657.2	656.8	654.2
40°	698.7	699.9	700.6	702.0	706.5	711.6	716.1	716.8	720.3	719.6	716.3
42.5°	771.7	772.1	776.1	778.2	782.5	785.0	790.7	791.4	795.6	793.7	790.0
45°	853.5	857.7	861.5	865.7	870.2	873.2	877.7	876.7	879.5	876.7	874.6
47.5°	939.6	942.6	951.0	957.6	964.9	967.5	973.8	971.0	973.8	969.8	969.1
50°	1034.3	1039.7	1046.9	1054.5	1062.2	1066.4	1074.6	1071.1	1074.9	1071.1	1069.0
52.5°	1127.6	1129.0	1145.0	1156.0	1166.8	1171.7	1176.6	1175.0	1175.2	1175.0	1172.9
55°	1216.2	1219.5	1235.5	1250.5	1269.2	1283.1	1291.5	1290.6	1288.5	1286.4	1282.8
57.5°	1316.1	1319.4	1337.7	1356.2	1377.6	1397.3	1414.4	1432.0	1438.8	1440.6	1432.9
60°	1451.2	1451.0	1475.3	1497.9	1528.3	1557.6	1595.2	1633.4	1677.2	1697.6	1670.7
62.5°	1588.6	1594.2	1629.4	1669.3	1732.1	1793.3	1862.5	1930.5	1999.9	2056.4	1996.4
65°	1572.2	1593.8	1646.0	1736.3	1852.4	1990.3	2139.4	2297.2	2439.8	2537.8	2427.8
67.5°	1362.6	1393.3	1446.5	1556.2	1701.4	1900.2	2150.6	2462.7	2825.5	3000.9	2783.5
70°	987.6	1022.3	1078.1	1185.3	1329.0	1518.0	1790.0	2164.7	2644.9	2821.7	2582.3
72.5°	491.5	510.2	544.7	612.9	721.7	875.1	1121.7	1481.9	1906.8	2069.0	1850.3
75°	166.9	175.6	181.5	203.8	238.2	298.5	421.1	647.9	988.3	1184.8	974.3
77.5°	96.4	96.6	100.6	104.6	110.4	117.0	133.4	175.2	302.9	430.3	313.5
80°	62.4	62.1	65.4	68.5	72.5	75.7	76.7	81.1	93.6	110.9	99.2
82.5°	32.4	36.3	43.6	47.6	55.1	56.5	54.6	53.0	56.0	58.2	59.6
85°	17.8	15.5	23.2	30.0	33.3	33.8	33.8	31.9	33.1	32.4	35.2
87.5°	8.2	7.5	9.1	14.8	15.7	13.4	14.1	12.4	8.9	8.7	9.8
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°
0°	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1
2.5°	505.8	506.0	506.0	506.7	506.9	507.4	507.9	508.1
5°	501.8	502.5	502.0	502.7	502.7	503.2	503.2	503.4
7.5°	495.9	496.6	496.6	496.6	496.4	497.1	497.1	497.1
10°	489.8	490.3	490.1	489.6	489.1	489.8	489.6	489.4
12.5°	488.0	486.8	485.8	485.4	484.4	484.7	484.0	484.0
15°	489.1	487.0	485.4	484.7	483.7	483.3	482.8	483.0
17.5°	492.2	489.6	487.5	486.3	485.1	484.4	483.5	483.7
20°	497.6	494.5	491.5	489.1	487.0	485.8	485.1	484.9
22.5°	505.5	501.1	496.6	493.1	490.3	488.7	488.0	487.5
25°	514.7	509.8	504.6	500.6	497.8	495.7	494.3	494.3
27.5°	526.2	522.2	517.5	512.8	510.2	508.1	507.2	506.7
30°	545.4	541.6	537.9	533.4	530.2	528.0	526.4	525.0
32.5°	570.0	567.0	563.9	560.6	557.6	554.8	552.2	551.0
35°	604.7	602.4	600.3	596.5	595.3	593.7	592.3	591.1
37.5°	652.6	651.6	651.6	647.6	646.7	646.0	644.6	644.8
40°	715.4	716.3	715.2	713.8	713.1	711.2	711.2	712.8
42.5°	789.7	790.4	793.0	790.7	793.2	790.9	789.5	790.7
45°	876.0	878.6	883.8	881.4	883.0	879.1	874.1	874.4
47.5°	972.9	975.2	977.3	975.7	975.9	969.3	962.8	961.1
50°	1073.4	1074.4	1075.6	1073.2	1073.7	1066.4	1058.9	1059.1
52.5°	1172.9	1177.3	1182.0	1175.7	1174.3	1166.1	1155.5	1151.3
55°	1286.6	1292.9	1287.5	1276.5	1265.5	1254.5	1240.6	1238.3
57.5°	1426.8	1416.0	1399.1	1378.3	1363.0	1347.6	1333.5	1327.6
60°	1621.9	1581.3	1550.8	1519.9	1500.4	1481.4	1462.9	1460.1
62.5°	1897.6	1827.5	1766.8	1702.8	1650.5	1609.7	1577.1	1568.0
65°	2243.3	2077.5	1933.7	1799.6	1683.1	1595.2	1539.8	1515.4
67.5°	2391.9	2064.6	1818.1	1627.8	1475.3	1368.9	1309.1	1279.3
70°	2101.9	1712.2	1444.2	1253.5	1114.7	1001.2	947.1	915.2
72.5°	1446.0	1089.2	861.2	703.0	592.1	497.1	459.6	456.8
75°	649.3	430.0	296.4	228.4	192.3	167.2	159.4	153.6
77.5°	181.7	134.4	119.8	112.1	104.6	95.9	92.6	93.3
80°	88.4	83.5	80.2	75.3	68.5	61.2	57.9	59.3
82.5°	58.6	57.9	60.0	56.5	46.7	39.6	33.3	30.5
85°	35.6	36.1	36.8	37.0	31.4	22.0	15.0	16.9
87.5°	14.1	16.2	17.6	18.3	17.1	10.6	8.4	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)