

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: P299395

Luminaire Tested: **GLNA-AF-01-LED-E1-5NQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4497 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

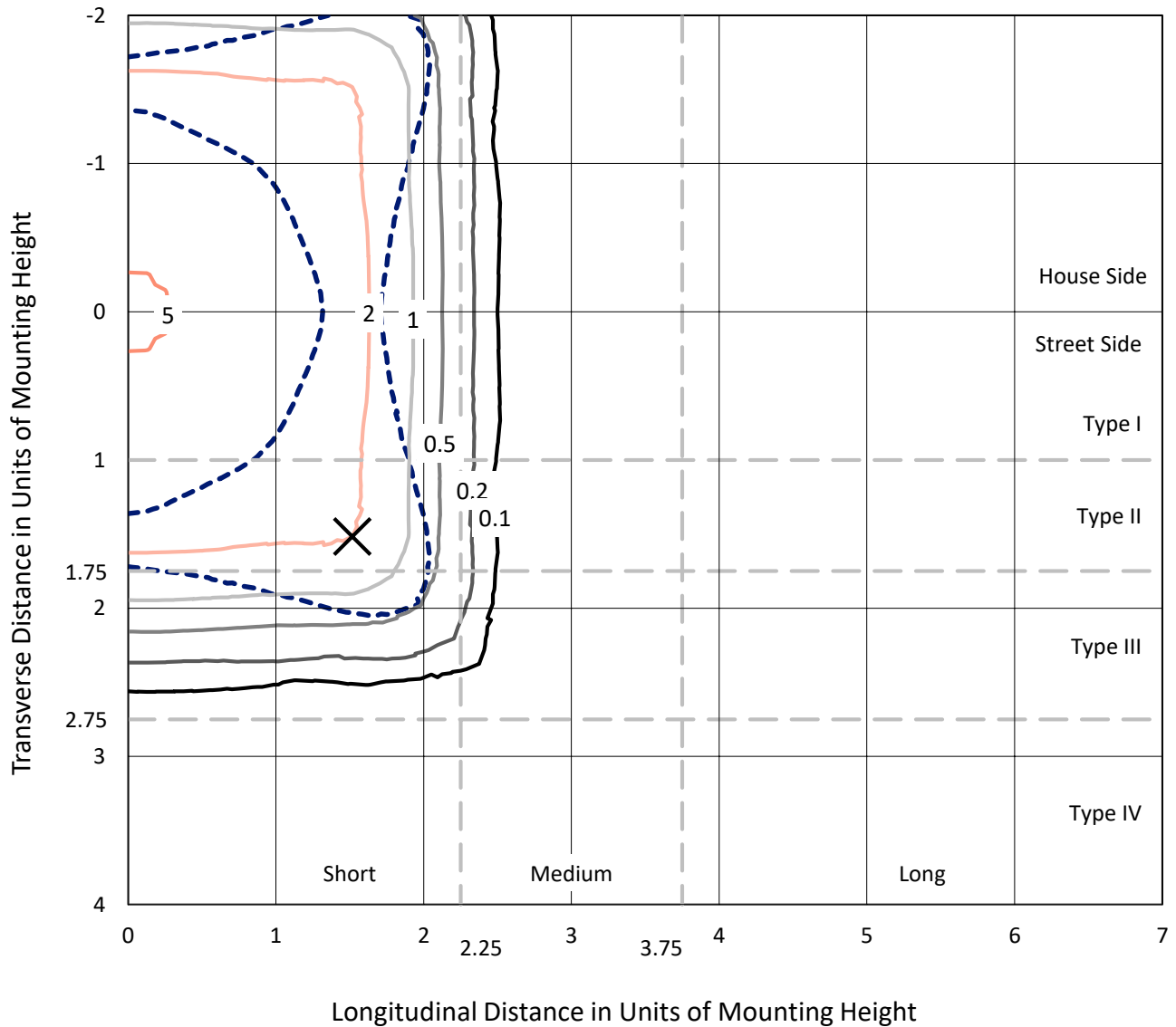
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

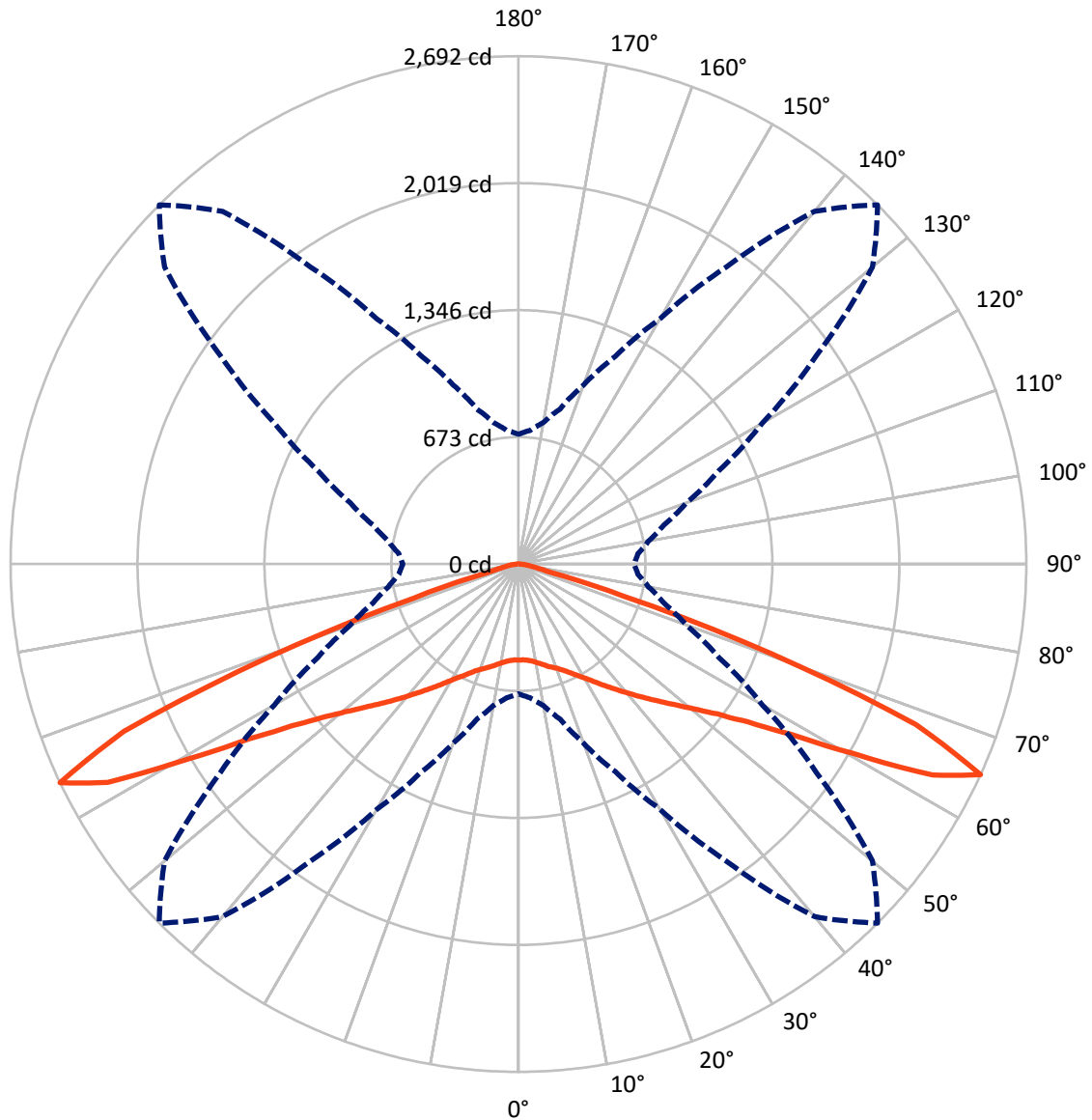
× Max cd
 - - - 1/2 Max cd



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 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2248.5	0.0	2248.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2248.5	0.0	2248.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	4497.0	0.0	4497.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	1.1
10°-20°	159.1	3.5
20°-30°	297.4	6.6
30°-40°	503.0	11.2
40°-50°	822.5	18.3
50°-60°	1307.9	29.1
60°-70°	1182.2	26.3
70°-80°	149.6	3.3
80°-90°	25.7	0.6
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°	4497.0	100.0
0°-180°	4497.0	100.0



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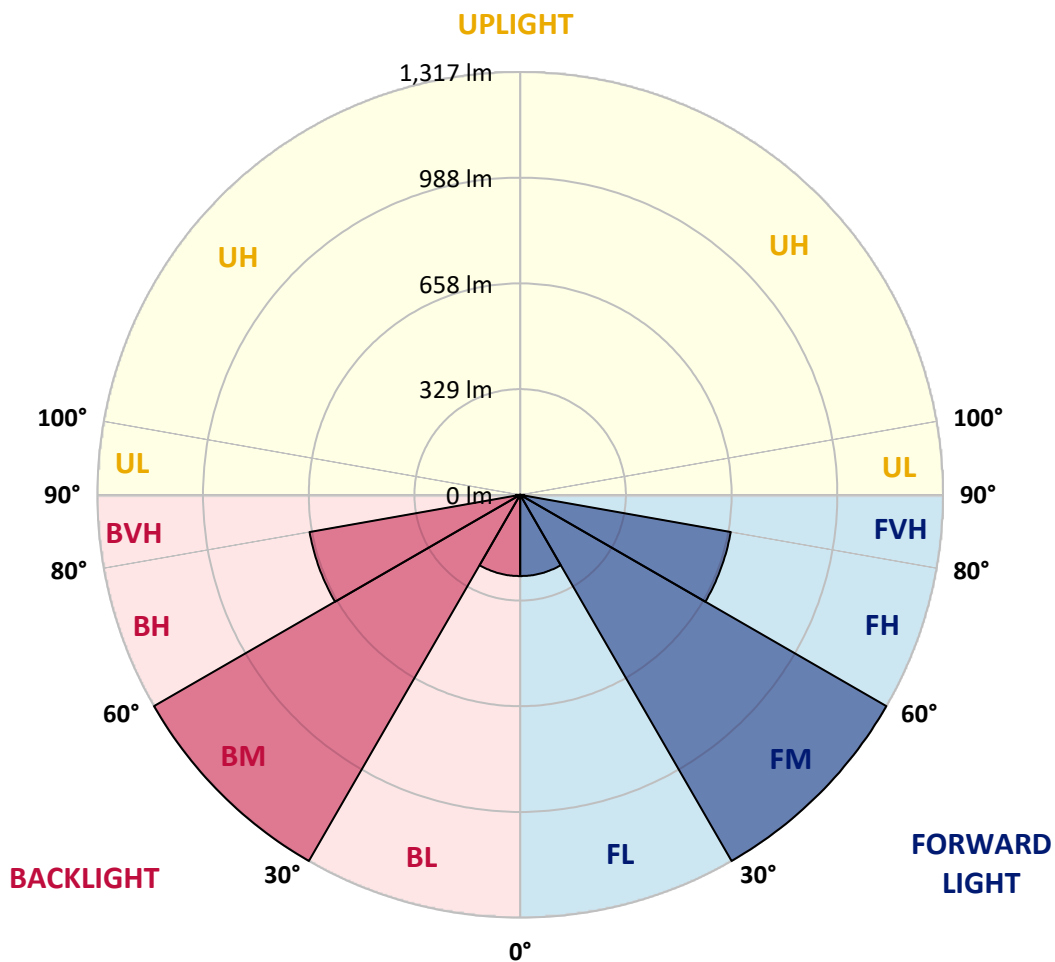
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.0	5.6			
FM	(30°-60°)	1316.7	29.3			
FH	(60°-80°)	665.9	14.8			G1/1800
FVH	(80°-90°)	12.9	0.3			G1/100
BL	(0°-30°)	253.0	5.6	B1/500		
BM	(30°-60°)	1316.7	29.3	B2/2500		
BH	(60°-80°)	665.9	14.8	B2/1000		G1/1800
BVH	(80°-90°)	12.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8
2.5°	509.3	509.7	510.1	509.7	510.1	509.5	509.0	509.7	509.0	508.4	508.8
5°	513.7	513.9	513.9	513.3	513.9	513.5	512.8	513.7	513.0	512.4	512.8
7.5°	521.1	521.9	521.3	520.6	521.1	520.6	520.2	520.4	520.2	519.6	519.8
10°	530.9	531.6	531.2	530.9	531.4	531.2	530.7	530.5	530.7	530.1	530.1
12.5°	543.0	542.7	542.5	542.7	543.4	543.4	543.2	543.4	543.8	544.0	543.6
15°	554.7	555.2	555.2	555.2	556.4	557.5	558.1	558.5	559.4	559.6	558.7
17.5°	569.5	569.5	569.3	569.5	570.8	572.4	573.1	573.9	574.8	575.4	574.3
20°	585.9	586.3	586.3	586.8	588.4	590.3	590.3	590.8	590.3	590.8	590.1
22.5°	605.9	607.2	607.2	607.4	609.1	611.4	610.8	611.4	610.3	611.2	610.3
25°	632.0	633.9	633.5	633.5	634.8	636.3	636.5	637.7	637.5	638.6	637.9
27.5°	661.5	664.5	665.3	665.1	666.0	667.4	667.8	669.3	668.5	669.3	668.9
30°	696.9	698.2	699.9	700.5	701.5	703.0	703.0	703.2	702.2	703.4	704.1
32.5°	733.6	735.9	737.6	741.3	743.2	744.3	744.1	744.5	743.5	745.1	746.4
35°	782.0	783.7	786.4	789.4	791.9	791.7	791.1	791.3	791.3	792.7	794.0
37.5°	840.3	840.8	844.3	848.6	849.8	848.6	844.8	843.9	842.0	843.9	846.0
40°	902.0	903.5	910.7	913.4	914.0	911.7	906.3	903.1	898.9	901.2	904.2
42.5°	966.7	969.7	976.2	981.0	983.1	981.7	974.1	969.2	963.8	965.0	968.0
45°	1038.3	1041.9	1051.2	1055.8	1059.8	1057.5	1050.1	1042.7	1034.1	1034.7	1039.4
47.5°	1118.3	1121.9	1133.9	1141.7	1143.8	1143.4	1135.2	1125.1	1113.3	1112.9	1116.9
50°	1208.1	1211.6	1226.6	1238.6	1244.7	1244.1	1234.4	1220.1	1205.7	1206.0	1211.0
52.5°	1295.7	1300.1	1315.7	1336.3	1348.3	1357.0	1351.1	1337.6	1320.1	1320.5	1325.2
55°	1377.8	1385.2	1403.1	1431.1	1453.4	1477.6	1484.6	1484.2	1473.6	1476.6	1481.2
57.5°	1417.6	1428.6	1456.2	1500.4	1545.9	1595.2	1636.9	1668.0	1681.3	1701.3	1696.7
60°	1342.2	1359.7	1400.3	1465.4	1555.4	1658.1	1768.3	1875.9	1967.7	2037.0	1997.2
62.5°	1099.0	1121.7	1171.0	1254.4	1390.5	1554.9	1765.8	2020.2	2297.3	2464.6	2345.1
65°	687.6	711.2	761.4	850.7	1009.9	1214.4	1500.4	1922.0	2439.9	2692.0	2449.0
67.5°	268.1	281.0	308.1	365.2	484.8	666.8	953.9	1432.4	2051.8	2272.7	2013.6
70°	134.4	135.6	140.7	151.2	176.9	229.8	349.6	664.1	1176.7	1421.2	1134.3
72.5°	97.1	97.3	99.8	104.5	112.7	124.5	147.2	203.2	382.7	584.9	358.7
75°	74.3	75.2	76.7	79.2	83.6	89.5	97.7	117.1	145.1	168.3	141.5
77.5°	57.3	59.0	60.0	62.3	65.1	69.1	71.4	78.8	91.6	96.5	95.0
80°	43.6	45.1	47.4	49.3	51.2	53.1	52.2	55.6	62.3	66.3	64.2
82.5°	27.8	29.5	36.2	37.9	38.8	40.0	38.5	38.8	41.7	44.2	41.7
85°	17.9	19.0	23.0	25.1	25.3	26.1	25.5	24.0	24.0	21.9	24.6
87.5°	8.2	8.4	10.3	12.2	12.6	11.4	11.2	10.7	8.6	8.2	8.8
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°	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8
2.5°	508.6	509.0	509.3	509.9	510.1	510.1	510.3	510.7
5°	512.6	513.3	513.5	514.3	514.5	514.3	514.7	514.9
7.5°	519.8	520.8	521.3	522.1	521.5	522.3	522.5	522.5
10°	530.3	531.4	531.6	532.4	532.0	532.4	532.4	532.0
12.5°	544.2	544.4	543.8	544.4	543.6	544.0	543.4	543.0
15°	559.6	559.0	557.5	557.5	556.2	556.4	556.2	556.0
17.5°	574.5	573.3	572.2	571.8	570.8	570.5	569.9	569.9
20°	591.0	590.3	589.7	588.9	587.8	586.8	586.6	587.0
22.5°	610.8	610.6	610.6	610.1	608.7	607.6	607.0	607.0
25°	637.3	635.4	635.4	635.2	634.6	633.9	632.7	633.3
27.5°	667.2	666.2	667.0	666.8	666.2	666.2	665.3	665.3
30°	704.1	703.6	704.9	703.9	701.8	701.5	700.7	699.6
32.5°	746.6	746.2	748.1	746.8	743.5	741.6	739.9	739.0
35°	794.0	794.2	796.5	795.7	791.9	790.6	787.7	787.3
37.5°	845.8	849.2	853.2	854.0	850.9	850.0	846.9	845.2
40°	906.7	911.1	917.2	918.7	915.3	914.7	910.3	907.9
42.5°	971.5	979.1	986.7	988.0	984.6	981.2	977.0	975.3
45°	1044.0	1053.1	1063.0	1065.5	1060.4	1056.4	1050.9	1050.9
47.5°	1125.3	1136.7	1147.8	1154.8	1150.1	1145.9	1139.4	1135.2
50°	1221.3	1236.9	1251.4	1258.6	1251.2	1243.2	1231.9	1228.1
52.5°	1341.8	1358.6	1371.3	1367.5	1356.1	1345.0	1332.5	1327.5
55°	1495.5	1501.2	1501.2	1486.9	1464.2	1445.4	1425.8	1419.3
57.5°	1687.8	1665.9	1632.2	1589.5	1535.8	1489.0	1457.4	1442.5
60°	1913.8	1808.5	1689.5	1572.6	1476.6	1397.4	1350.4	1329.0
62.5°	2064.4	1788.9	1550.5	1362.9	1224.7	1129.3	1064.4	1039.2
65°	1929.4	1492.0	1172.7	948.2	797.6	700.5	636.3	612.7
67.5°	1413.2	934.9	624.5	447.5	327.9	261.6	235.3	224.3
70°	634.4	329.2	201.8	157.5	135.8	124.7	119.8	118.2
72.5°	191.2	138.4	116.7	105.3	96.7	91.2	87.2	86.8
75°	115.4	96.0	85.3	78.6	73.1	68.7	66.6	65.9
77.5°	80.7	70.6	65.5	60.7	56.4	53.1	51.2	49.7
80°	56.7	51.8	49.5	46.8	44.0	40.9	38.1	36.9
82.5°	37.9	36.9	36.9	35.2	32.9	29.9	24.4	23.2
85°	24.4	24.2	24.6	24.0	22.3	19.2	15.8	15.0
87.5°	11.4	11.6	12.8	12.6	12.2	10.1	8.0	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)