

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: P301863

Luminaire Tested: **GLNA-AF-01-LED-E1-SL4-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301863
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3712.9 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

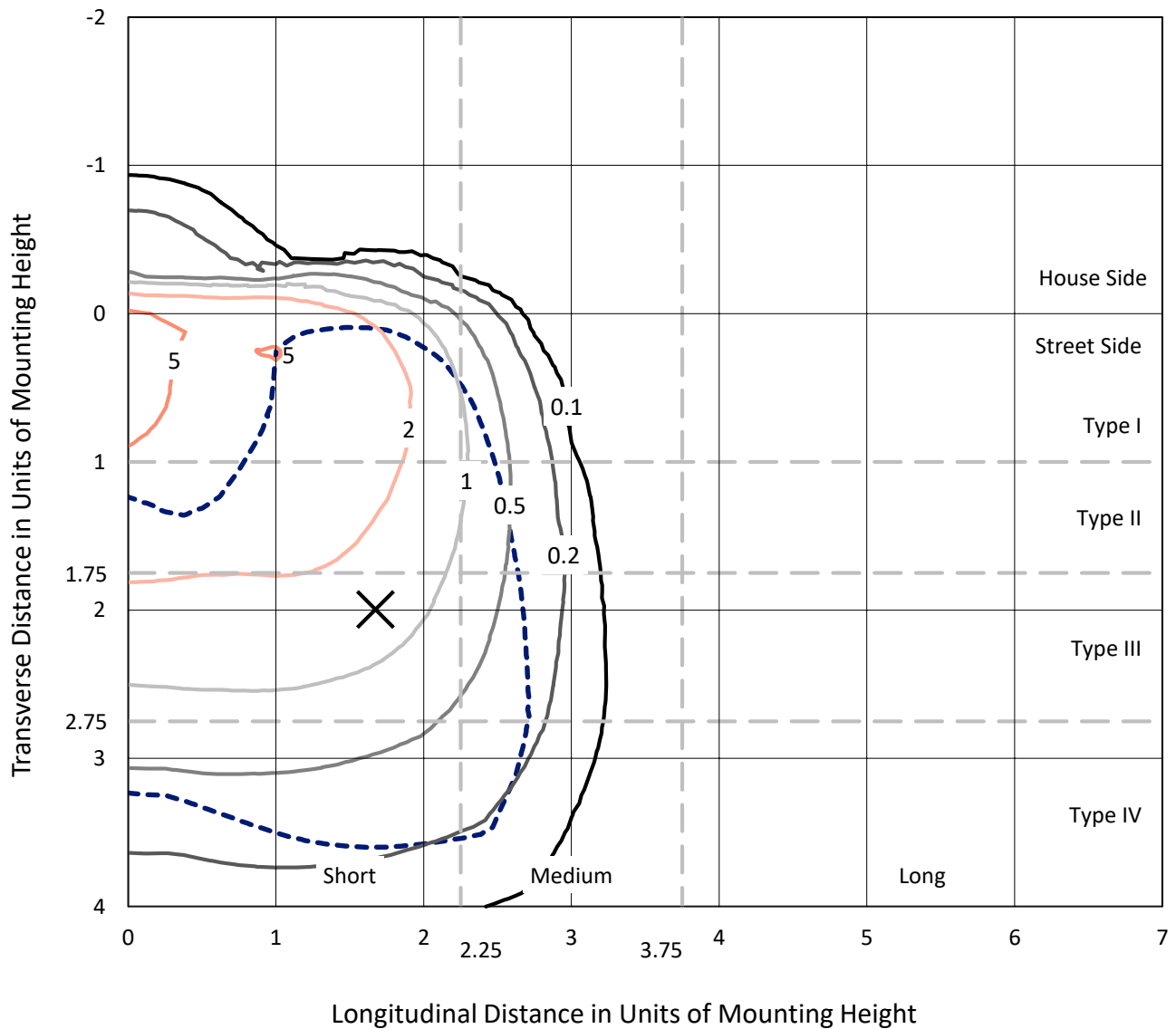
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P301863
 CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

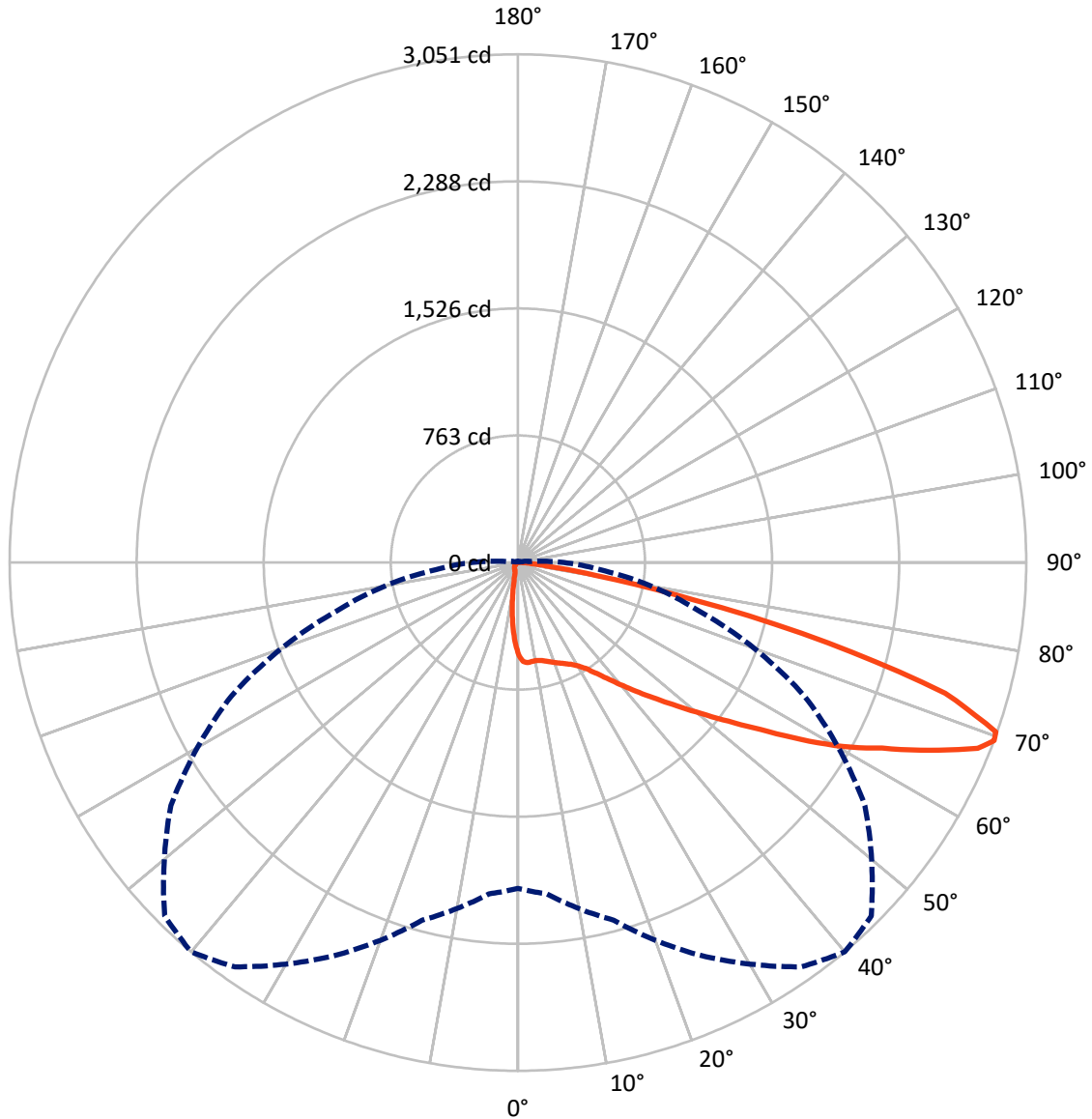


Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301863

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-800-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P301863

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-800-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	217.2	0.0	217.2
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	3495.7	0.0	3495.7
	% Fixture	94.1	0.0	94.1
Total	Lumens	3712.9	0.0	3712.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.2
10°-20°	110.6	3.0
20°-30°	186.3	5.0
30°-40°	305.0	8.2
40°-50°	528.1	14.2
50°-60°	831.8	22.4
60°-70°	1086.2	29.3
70°-80°	559.5	15.1
80°-90°	60.5	1.6
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°	3712.9	100.0
0°-180°	3712.9	100.0



REPORT NUMBER: P301863

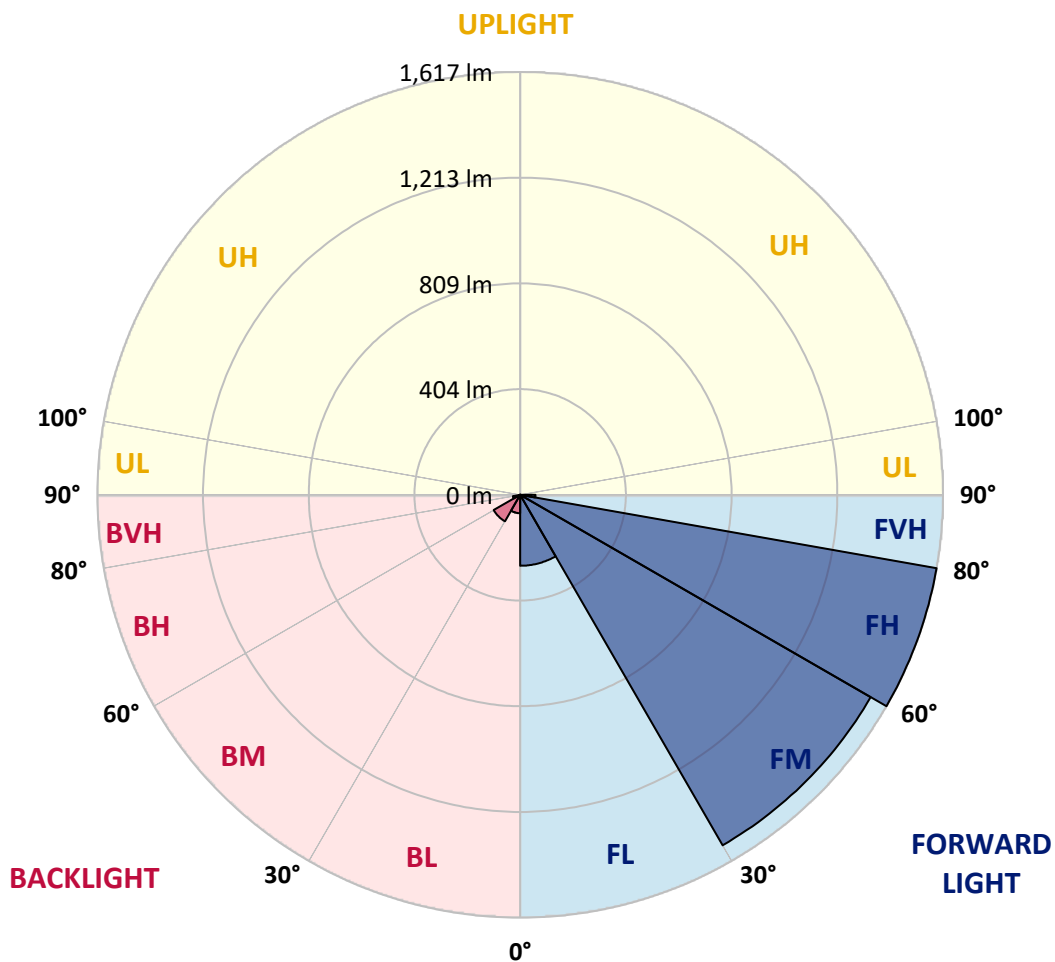
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	271.5	7.3			
FM	(30°-60°)	1548.1	41.7			
FH	(60°-80°)	1617.5	43.6			G1/1800
FVH	(80°-90°)	58.6	1.6			G1/100
BL	(0°-30°)	70.4	1.9	B0/110		
BM	(30°-60°)	116.8	3.1	B0/220		
BH	(60°-80°)	28.2	0.8	B0/110		G0/110
BVH	(80°-90°)	1.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





REPORT NUMBER: P301863

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7
2.5°	609.1	605.8	603.8	601.1	597.8	595.0	593.8	585.7	577.9	567.3	555.2
5°	620.4	619.3	615.7	612.2	608.2	603.8	601.4	591.6	580.6	565.1	543.9
7.5°	621.5	620.1	615.7	610.9	605.3	600.0	595.8	586.1	575.9	560.3	534.4
10°	619.7	618.2	614.8	609.5	602.7	597.6	593.4	584.1	575.5	561.4	532.6
12.5°	617.7	616.2	614.6	612.0	606.0	602.5	598.9	590.1	582.4	570.4	539.0
15°	619.7	618.8	620.6	619.5	616.2	613.1	609.5	601.6	594.5	584.6	550.8
17.5°	628.1	628.1	633.6	634.3	631.2	626.8	621.7	613.7	607.8	599.4	564.7
20°	647.8	647.1	654.2	655.5	648.0	641.1	633.6	623.9	619.3	614.0	578.4
22.5°	681.6	678.5	682.7	681.4	666.6	656.0	646.7	634.7	632.3	629.9	593.6
25°	725.6	723.8	726.7	713.6	687.6	673.2	662.1	648.7	648.7	651.1	610.9
27.5°	789.4	782.8	773.1	750.1	711.0	692.6	680.7	666.3	670.1	679.2	633.6
30°	854.9	847.6	825.2	789.9	739.5	720.3	706.3	691.3	700.2	716.7	664.1
32.5°	919.4	911.2	879.6	835.0	780.4	761.2	747.7	731.1	745.9	773.7	708.8
35°	981.9	974.6	938.2	885.6	834.7	818.8	806.5	792.1	811.1	850.0	771.8
37.5°	1052.2	1044.3	999.8	942.8	900.8	889.3	880.3	865.9	899.1	956.1	859.5
40°	1138.6	1125.2	1065.3	1008.5	977.3	971.8	965.6	963.6	1015.1	1094.0	976.4
42.5°	1237.6	1215.5	1133.8	1077.6	1061.3	1065.3	1063.7	1072.6	1160.3	1265.5	1118.7
45°	1336.7	1308.1	1210.0	1151.5	1153.7	1167.6	1176.2	1211.6	1342.2	1462.2	1271.9
47.5°	1420.6	1392.6	1283.2	1231.2	1257.8	1285.2	1308.6	1375.6	1529.2	1655.8	1391.0
50°	1492.5	1465.9	1360.7	1319.0	1378.6	1422.8	1460.9	1560.1	1730.3	1803.2	1474.6
52.5°	1551.3	1533.6	1441.2	1419.5	1516.8	1581.5	1637.2	1756.1	1908.4	1923.0	1539.5
55°	1608.5	1595.9	1527.6	1539.1	1679.0	1767.2	1837.7	1964.1	2061.8	2022.9	1601.9
57.5°	1674.4	1662.9	1626.2	1690.7	1892.3	2003.2	2080.1	2148.4	2196.8	2125.0	1660.7
60°	1741.5	1734.9	1735.8	1859.1	2137.1	2243.7	2286.1	2303.8	2329.4	2221.1	1664.0
62.5°	1805.6	1818.2	1861.1	2046.5	2371.6	2453.4	2474.8	2492.3	2462.2	2236.4	1537.3
65°	1914.1	1934.7	2037.0	2297.4	2629.5	2717.1	2739.2	2679.3	2483.2	2039.2	1250.5
67.5°	1967.2	2004.8	2187.3	2531.2	2879.7	2977.0	2968.8	2691.4	2228.4	1555.0	802.5
69°	1956.1	1996.1	2222.0	2602.8	2962.8	3051.0	2999.1	2542.7	1898.5	1126.5	492.6
70°	1912.4	1952.8	2204.1	2600.2	2973.4	3043.3	2942.9	2359.0	1605.2	823.7	308.1
72.5°	1597.0	1631.9	1956.8	2350.2	2739.2	2682.4	2462.0	1634.4	782.1	224.3	69.4
75°	983.0	1002.5	1404.1	1770.5	2068.9	1923.0	1640.3	813.1	233.2	63.4	38.5
77.5°	519.4	528.2	768.7	1043.6	1311.5	1085.1	840.7	317.1	107.4	39.8	27.8
80°	307.0	313.6	413.9	477.2	567.5	474.1	336.2	194.7	76.9	25.0	24.8
82.5°	175.7	179.9	300.1	265.2	223.7	191.0	167.3	184.5	46.2	16.8	25.6
85°	64.5	65.4	168.8	201.8	133.0	79.1	83.1	152.9	12.4	10.6	20.1
87.5°	30.1	29.4	86.9	123.5	77.8	50.2	64.8	33.6	4.9	6.9	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P301863

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7	554.7
2.5°	548.1	539.9	525.1	509.9	494.4	482.5	470.7	461.5	458.4	452.6	453.1
5°	531.3	516.3	485.3	453.9	421.2	394.3	368.9	348.3	338.4	328.2	328.2
7.5°	516.7	494.8	446.4	395.4	342.6	298.1	258.1	228.1	211.5	198.2	198.0
10°	511.2	481.6	413.9	340.8	267.2	206.6	159.1	128.6	112.9	102.8	102.3
12.5°	513.6	476.9	389.0	290.4	198.0	132.8	92.2	72.5	65.9	62.8	62.8
15°	520.7	475.6	364.0	241.1	139.9	83.1	61.2	55.9	55.5	55.5	55.5
17.5°	529.3	476.1	338.4	193.2	95.3	59.5	52.8	52.2	52.6	52.6	52.6
20°	538.2	476.3	310.7	148.7	67.2	51.7	49.7	49.5	49.9	49.9	50.2
22.5°	549.0	477.4	283.1	111.2	55.5	48.8	47.3	47.3	47.5	47.5	47.3
25°	561.4	479.6	254.4	82.4	50.6	46.9	45.5	45.3	45.5	45.3	45.1
27.5°	576.8	482.7	222.3	64.5	48.4	44.9	43.8	43.8	43.5	43.3	43.1
30°	596.3	486.2	186.3	54.8	46.2	43.1	42.0	41.8	41.5	41.1	41.1
32.5°	625.9	494.0	150.7	49.7	43.8	40.7	39.8	39.8	39.3	38.9	38.7
35°	671.4	509.2	118.9	46.6	41.1	38.0	36.9	36.9	36.5	36.2	36.0
37.5°	734.4	532.4	92.4	43.8	38.5	35.1	34.0	33.8	33.4	32.9	32.7
40°	818.2	561.1	72.7	41.1	35.8	32.3	31.4	30.9	30.1	29.4	29.4
42.5°	923.4	593.8	59.0	38.2	32.7	29.6	29.0	28.3	26.7	26.1	25.9
45°	1033.4	623.2	49.9	34.9	29.6	27.0	26.5	25.4	23.4	22.8	22.8
47.5°	1112.8	630.1	44.0	31.8	26.7	24.1	23.9	21.9	20.1	19.7	19.4
50°	1162.3	616.6	39.1	28.7	24.1	21.4	20.8	18.3	17.2	16.8	16.6
52.5°	1195.7	592.5	35.1	26.1	21.7	19.0	17.5	15.7	14.8	14.4	14.4
55°	1222.4	558.5	31.2	23.6	19.7	17.0	14.8	13.5	12.6	12.2	12.2
57.5°	1229.9	512.3	27.2	21.7	17.7	15.0	12.6	11.7	10.6	10.4	10.4
60°	1175.3	429.0	24.1	19.2	15.9	13.0	11.1	9.9	8.8	8.6	8.4
62.5°	1031.4	332.0	21.2	17.0	13.9	11.3	9.5	8.2	7.3	7.3	7.3
65°	786.8	222.6	18.6	14.8	12.2	9.5	8.2	6.6	6.2	6.2	6.4
67.5°	471.0	121.1	15.9	12.6	10.4	8.0	6.9	5.7	5.5	5.7	5.7
69°	276.0	71.2	14.4	11.3	9.1	7.1	6.0	5.1	5.5	5.7	5.7
70°	170.4	48.0	13.3	10.2	8.2	6.4	5.5	4.9	5.3	5.5	5.5
72.5°	47.5	24.8	10.6	8.0	6.6	5.3	4.4	4.4	5.1	5.3	5.3
75°	30.9	18.3	8.2	6.0	5.1	4.2	3.8	4.2	4.9	5.1	5.1
77.5°	25.6	15.0	6.6	4.9	4.2	4.0	3.5	3.8	4.4	4.6	4.6
80°	23.4	10.6	5.3	4.4	3.8	3.5	3.3	3.1	4.0	4.2	4.2
82.5°	22.3	8.4	4.6	4.0	3.5	3.1	2.9	3.1	3.5	3.8	4.0
85°	13.9	5.5	4.2	3.8	3.1	2.9	2.9	2.9	3.3	3.5	3.5
87.5°	5.1	4.4	3.8	3.1	2.7	2.7	2.7	2.7	2.9	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)