

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: P301800

Luminaire Tested: **GLNA-AF-01-LED-E1-SL4-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301800
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-SL4-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA 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: 3993.1 lumens
Efficiency: N/A
Efficacy: 67.7 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

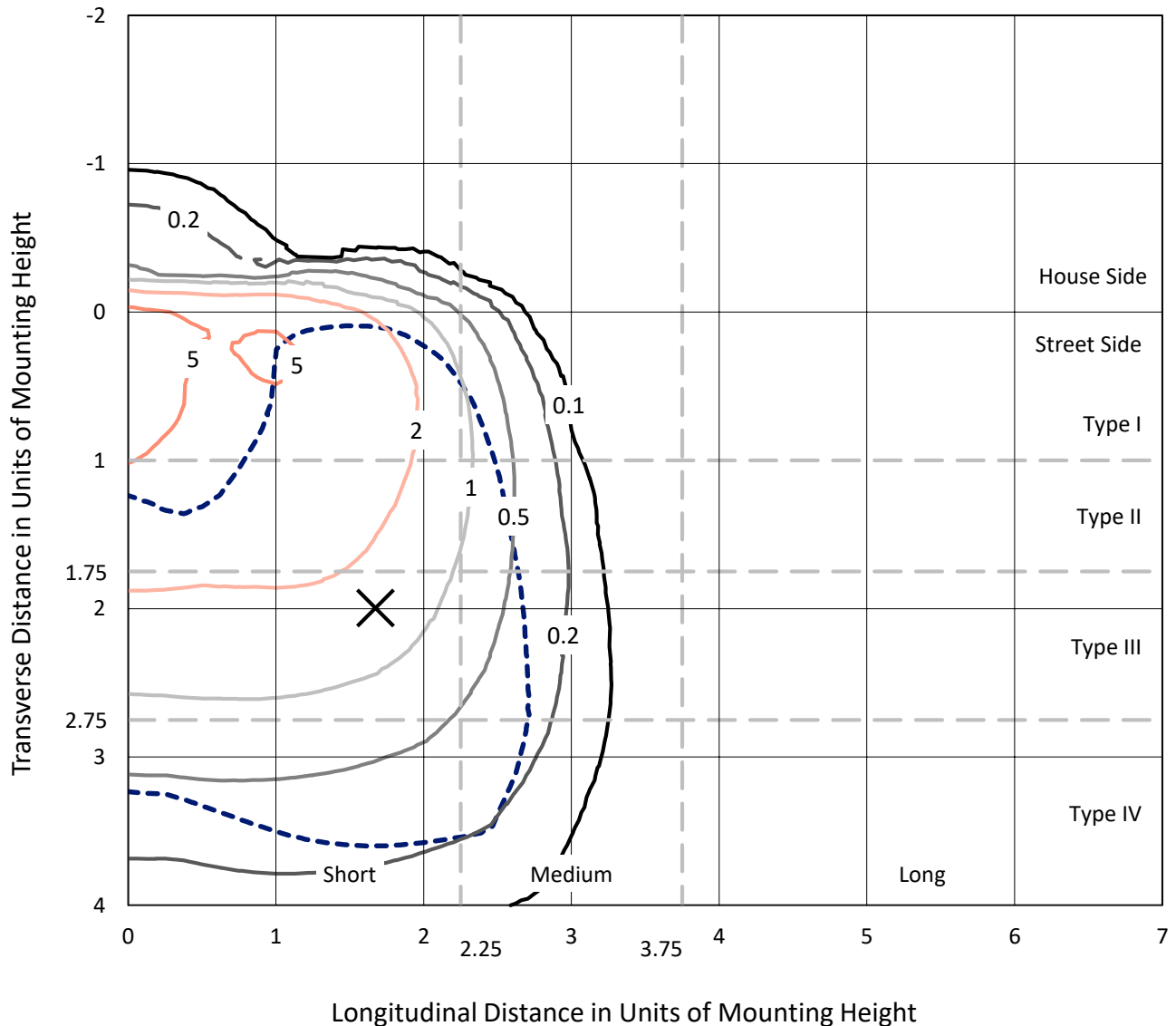
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

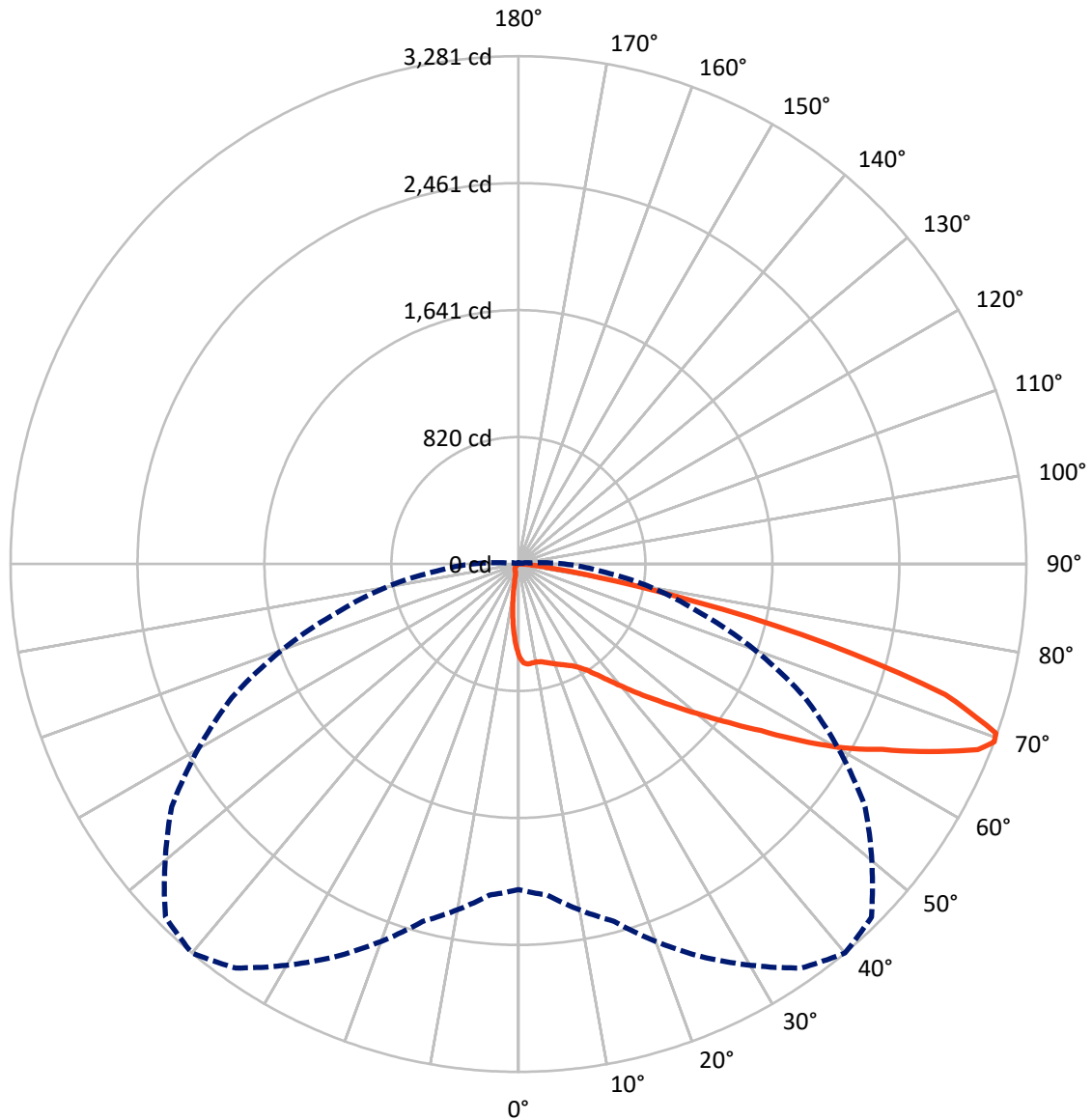
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	233.6	0.0	233.6
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	3759.5	0.0	3759.5
	% Fixture	94.1	0.0	94.1
Total	Lumens	3993.1	0.0	3993.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	1.2
10°-20°	119.0	3.0
20°-30°	200.4	5.0
30°-40°	328.0	8.2
40°-50°	567.9	14.2
50°-60°	894.5	22.4
60°-70°	1168.2	29.3
70°-80°	601.7	15.1
80°-90°	65.1	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°	3993.1	100.0
0°-180°	3993.1	100.0



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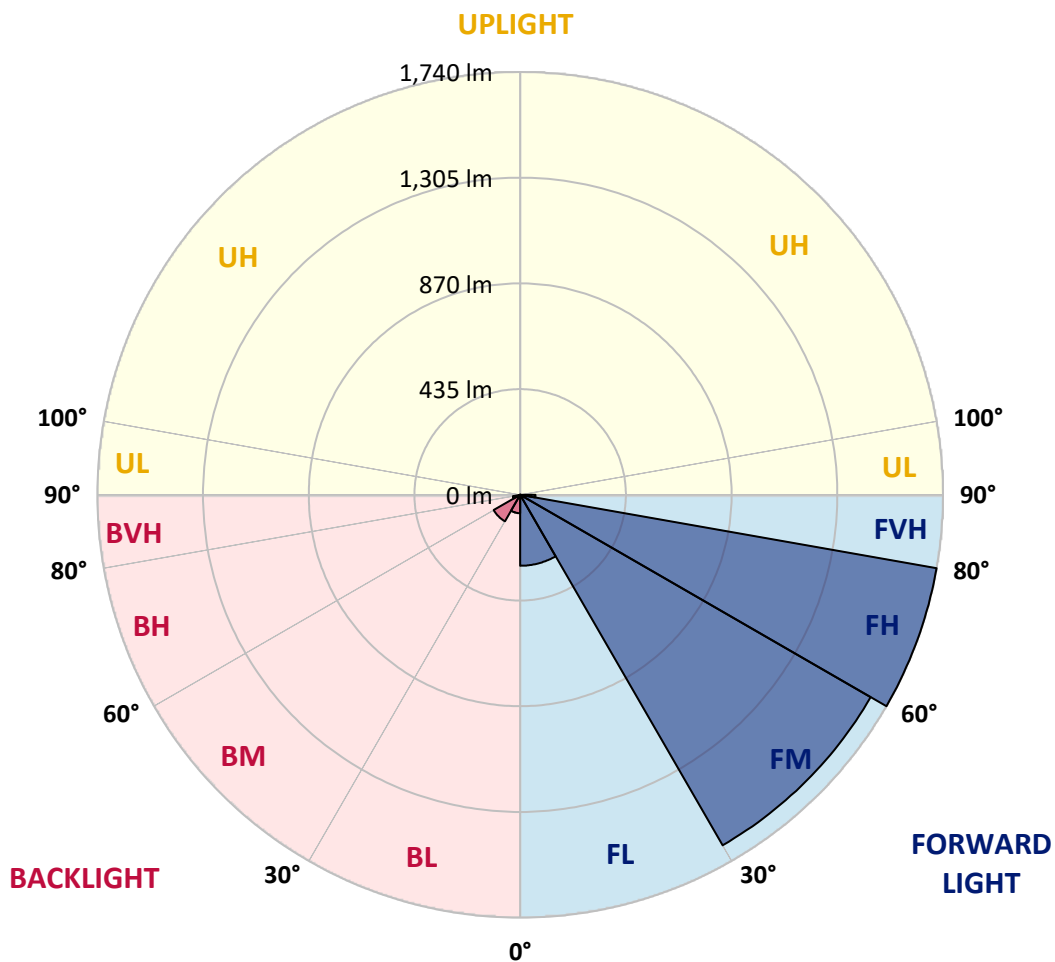
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	292.0	7.3			
FM	(30°-60°)	1664.9	41.7			
FH	(60°-80°)	1739.5	43.6			G1/1800
FVH	(80°-90°)	63.0	1.6			G1/100
BL	(0°-30°)	75.7	1.9	B0/110		
BM	(30°-60°)	125.6	3.1	B0/220		
BH	(60°-80°)	30.3	0.8	B0/110		G0/110
BVH	(80°-90°)	2.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6
2.5°	655.1	651.5	649.4	646.5	642.9	639.8	638.7	629.9	621.5	610.1	597.1
5°	667.2	666.0	662.2	658.4	654.1	649.4	646.7	636.3	624.4	607.8	584.9
7.5°	668.4	666.9	662.2	657.0	651.0	645.3	640.8	630.3	619.4	602.5	574.7
10°	666.5	664.8	661.2	655.5	648.2	642.7	638.2	628.2	618.9	603.7	572.8
12.5°	664.3	662.7	661.0	658.1	651.7	647.9	644.1	634.6	626.3	613.5	579.7
15°	666.5	665.5	667.4	666.2	662.7	659.3	655.5	647.0	639.4	628.7	592.3
17.5°	675.5	675.5	681.4	682.2	678.8	674.1	668.6	660.0	653.6	644.6	607.3
20°	696.7	695.9	703.5	705.0	696.9	689.5	681.4	671.0	666.0	660.3	622.0
22.5°	733.0	729.7	734.2	732.8	716.9	705.4	695.5	682.6	680.0	677.4	638.4
25°	780.3	778.4	781.5	767.5	739.4	724.0	712.1	697.6	697.6	700.2	657.0
27.5°	849.0	841.9	831.4	806.7	764.6	744.9	732.1	716.6	720.7	730.4	681.4
30°	919.4	911.5	887.5	849.5	795.3	774.6	759.6	743.5	753.0	770.8	714.2
32.5°	988.8	980.0	946.0	898.0	839.3	818.6	804.1	786.3	802.2	832.1	762.3
35°	1056.0	1048.2	1009.0	952.4	897.7	880.6	867.3	851.9	872.3	914.1	830.0
37.5°	1131.6	1123.1	1075.3	1014.0	968.8	956.4	946.7	931.2	966.9	1028.2	924.4
40°	1224.5	1210.0	1145.6	1084.6	1051.0	1045.1	1038.4	1036.3	1091.7	1176.5	1050.1
42.5°	1331.0	1307.3	1219.3	1158.9	1141.4	1145.6	1144.0	1153.5	1247.8	1361.0	1203.2
45°	1437.5	1406.8	1301.3	1238.3	1240.7	1255.7	1265.0	1303.0	1443.5	1572.5	1367.9
47.5°	1527.8	1497.6	1380.0	1324.1	1352.7	1382.1	1407.3	1479.3	1644.5	1780.7	1496.0
50°	1605.1	1576.6	1463.4	1418.5	1482.7	1530.2	1571.1	1677.8	1860.8	1939.3	1585.8
52.5°	1668.3	1649.3	1549.9	1526.6	1631.2	1700.9	1760.8	1888.6	2052.4	2068.1	1655.7
55°	1729.9	1716.3	1642.9	1655.2	1805.7	1900.5	1976.3	2112.3	2217.4	2175.5	1722.7
57.5°	1800.7	1788.3	1748.9	1818.3	2035.0	2154.4	2237.1	2310.5	2362.6	2285.3	1786.0
60°	1872.9	1865.8	1866.8	1999.4	2298.4	2413.0	2458.6	2477.6	2505.2	2388.7	1789.5
62.5°	1941.9	1955.4	2001.5	2200.9	2550.6	2638.5	2661.6	2680.4	2648.0	2405.1	1653.3
65°	2058.6	2080.7	2190.7	2470.7	2828.0	2922.1	2945.9	2881.4	2670.6	2193.1	1344.8
67.5°	2115.6	2156.0	2352.4	2722.2	3097.0	3201.6	3192.8	2894.5	2396.6	1672.3	863.0
69°	2103.7	2146.8	2389.7	2799.2	3186.4	3281.2	3225.4	2734.5	2041.7	1211.5	529.8
70°	2056.7	2100.2	2370.4	2796.3	3197.8	3272.9	3165.0	2537.0	1726.3	885.8	331.3
72.5°	1717.5	1755.1	2104.5	2527.5	2945.9	2884.8	2647.8	1757.7	841.2	241.2	74.6
75°	1057.2	1078.1	1510.0	1904.1	2225.0	2068.1	1764.1	874.4	250.8	68.2	41.4
77.5°	558.6	568.1	826.7	1122.3	1410.4	1167.0	904.1	341.1	115.5	42.8	29.9
80°	330.1	337.3	445.2	513.2	610.4	509.8	361.5	209.4	82.7	26.9	26.6
82.5°	189.0	193.5	322.8	285.2	240.5	205.4	179.9	198.5	49.7	18.1	27.6
85°	69.4	70.4	181.6	217.0	143.1	85.1	89.4	164.5	13.3	11.4	21.6
87.5°	32.3	31.6	93.4	132.9	83.7	54.0	69.6	36.1	5.2	7.4	5.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6	596.6
2.5°	589.5	580.7	564.7	548.3	531.7	518.9	506.3	496.3	493.0	486.8	487.3
5°	571.4	555.2	522.0	488.2	453.0	424.0	396.7	374.6	363.9	353.0	353.0
7.5°	555.7	532.2	480.1	425.2	368.4	320.6	277.6	245.3	227.5	213.2	213.0
10°	549.8	517.9	445.2	366.5	287.4	222.2	171.1	138.3	121.5	110.5	110.0
12.5°	552.4	512.9	418.3	312.3	213.0	142.8	99.1	78.0	70.8	67.5	67.5
15°	560.0	511.5	391.5	259.3	150.5	89.4	65.8	60.1	59.7	59.7	59.7
17.5°	569.3	512.0	363.9	207.7	102.4	63.9	56.8	56.1	56.6	56.6	56.6
20°	578.8	512.2	334.2	160.0	72.3	55.6	53.5	53.2	53.7	53.7	54.0
22.5°	590.4	513.4	304.5	119.6	59.7	52.5	50.9	50.9	51.1	51.1	50.9
25°	603.7	515.8	273.6	88.7	54.4	50.4	49.0	48.7	49.0	48.7	48.5
27.5°	620.4	519.1	239.1	69.4	52.1	48.2	47.1	47.1	46.8	46.6	46.3
30°	641.3	522.9	200.4	58.9	49.7	46.3	45.2	44.9	44.7	44.2	44.2
32.5°	673.1	531.2	162.1	53.5	47.1	43.7	42.8	42.8	42.3	41.8	41.6
35°	722.1	547.6	127.9	50.2	44.2	40.9	39.7	39.7	39.2	39.0	38.7
37.5°	789.8	572.6	99.4	47.1	41.4	37.8	36.6	36.4	35.9	35.4	35.2
40°	879.9	603.5	78.2	44.2	38.5	34.7	33.8	33.3	32.3	31.6	31.6
42.5°	993.0	638.7	63.5	41.1	35.2	31.8	31.1	30.4	28.8	28.0	27.8
45°	1111.4	670.3	53.7	37.6	31.8	29.0	28.5	27.3	25.2	24.5	24.5
47.5°	1196.7	677.6	47.3	34.2	28.8	25.9	25.7	23.5	21.6	21.2	20.9
50°	1250.0	663.1	42.1	30.9	25.9	23.1	22.3	19.7	18.5	18.1	17.8
52.5°	1285.9	637.2	37.8	28.0	23.3	20.4	18.8	16.9	15.9	15.4	15.4
55°	1314.6	600.6	33.5	25.4	21.2	18.3	15.9	14.5	13.5	13.1	13.1
57.5°	1322.7	551.0	29.2	23.3	19.0	16.2	13.5	12.6	11.4	11.2	11.2
60°	1264.0	461.3	25.9	20.7	17.1	14.0	11.9	10.7	9.5	9.3	9.0
62.5°	1109.3	357.0	22.8	18.3	15.0	12.1	10.2	8.8	7.8	7.8	7.8
65°	846.2	239.3	20.0	15.9	13.1	10.2	8.8	7.1	6.7	6.7	6.9
67.5°	506.5	130.3	17.1	13.5	11.2	8.6	7.4	6.2	5.9	6.2	6.2
69°	296.9	76.5	15.4	12.1	9.7	7.6	6.4	5.5	5.9	6.2	6.2
70°	183.3	51.6	14.3	10.9	8.8	6.9	5.9	5.2	5.7	5.9	5.9
72.5°	51.1	26.6	11.4	8.6	7.1	5.7	4.8	4.8	5.5	5.7	5.7
75°	33.3	19.7	8.8	6.4	5.5	4.5	4.0	4.5	5.2	5.5	5.5
77.5°	27.6	16.2	7.1	5.2	4.5	4.3	3.8	4.0	4.8	5.0	5.0
80°	25.2	11.4	5.7	4.8	4.0	3.8	3.6	3.3	4.3	4.5	4.5
82.5°	24.0	9.0	5.0	4.3	3.8	3.3	3.1	3.3	3.8	4.0	4.3
85°	15.0	5.9	4.5	4.0	3.3	3.1	3.1	3.1	3.6	3.8	3.8
87.5°	5.5	4.8	4.0	3.3	2.9	2.9	2.9	2.9	3.1	3.6	3.6
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)