

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: P301804

Luminaire Tested: **GLNA-AF-01-LED-E1-SL4-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301804
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-SL4-7050-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K 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: 4595.9 lumens
Efficiency: N/A
Efficacy: 77.9 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 - G2

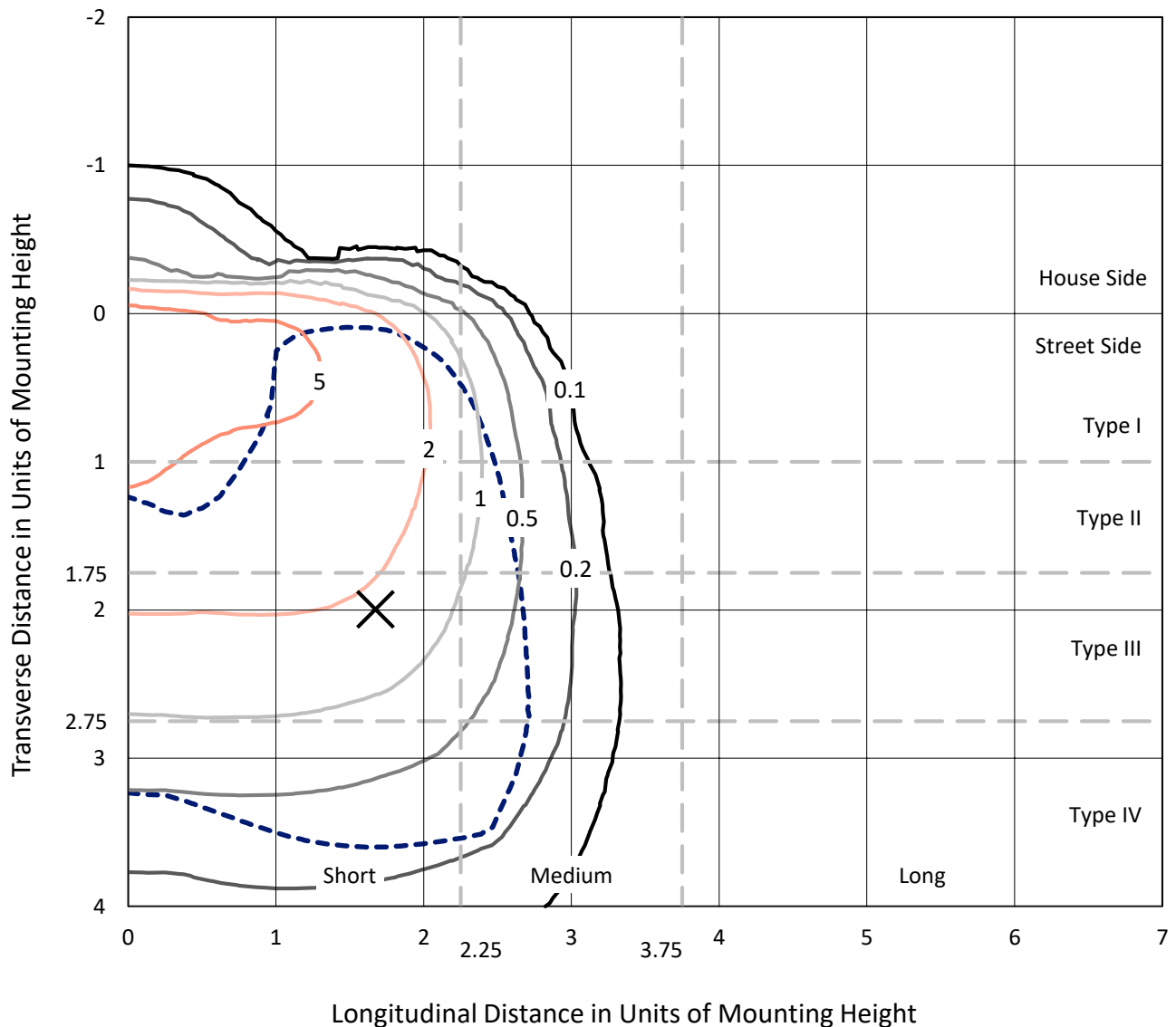
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

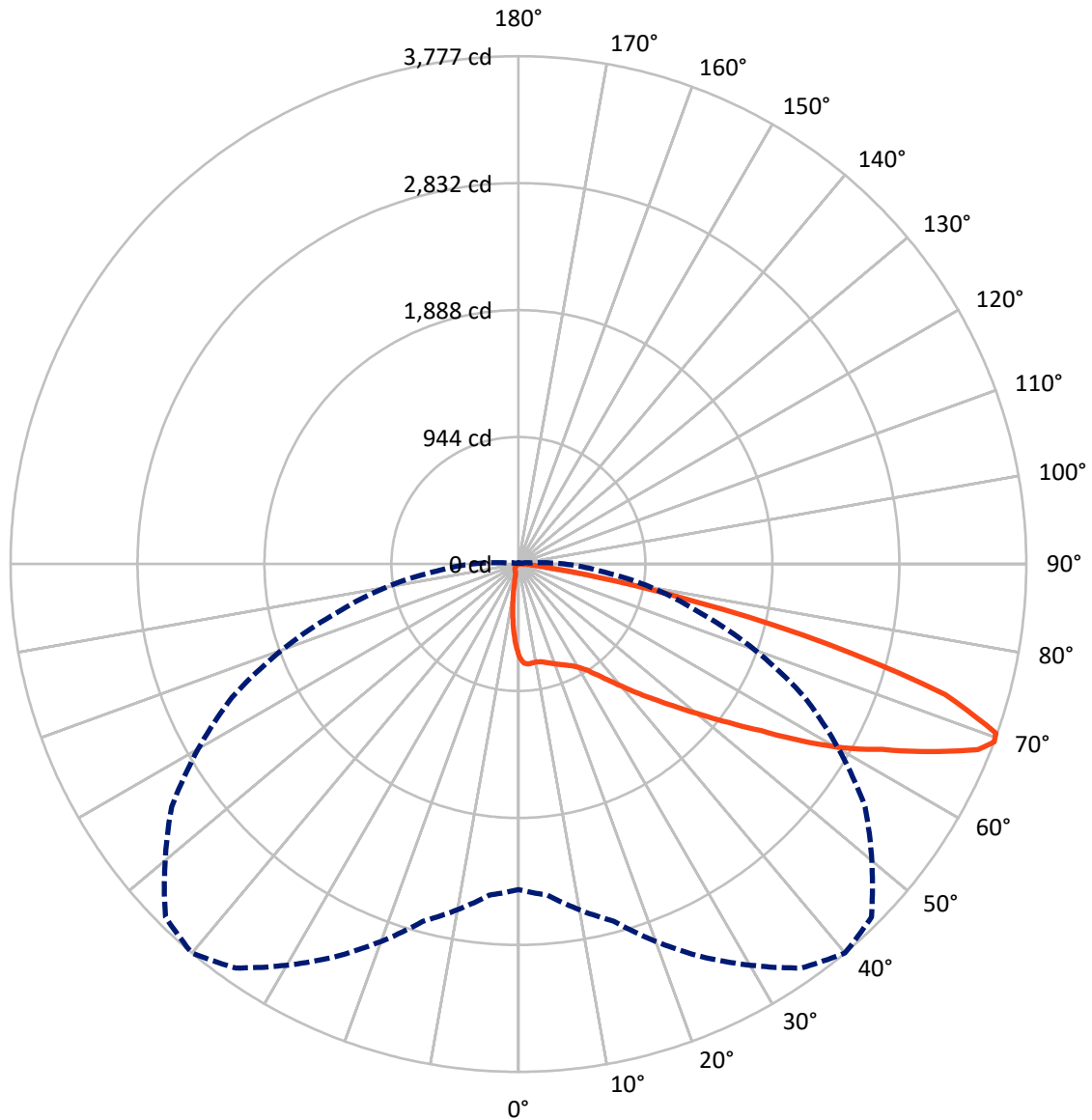
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.5 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	268.9	0.0	268.9
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	4327.0	0.0	4327.0
	% Fixture	94.1	0.0	94.1
Total	Lumens	4595.9	0.0	4595.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	1.2
10°-20°	136.9	3.0
20°-30°	230.6	5.0
30°-40°	377.5	8.2
40°-50°	653.6	14.2
50°-60°	1029.6	22.4
60°-70°	1344.6	29.3
70°-80°	692.5	15.1
80°-90°	74.9	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°	4595.9	100.0
0°-180°	4595.9	100.0

Coefficient of Utilization



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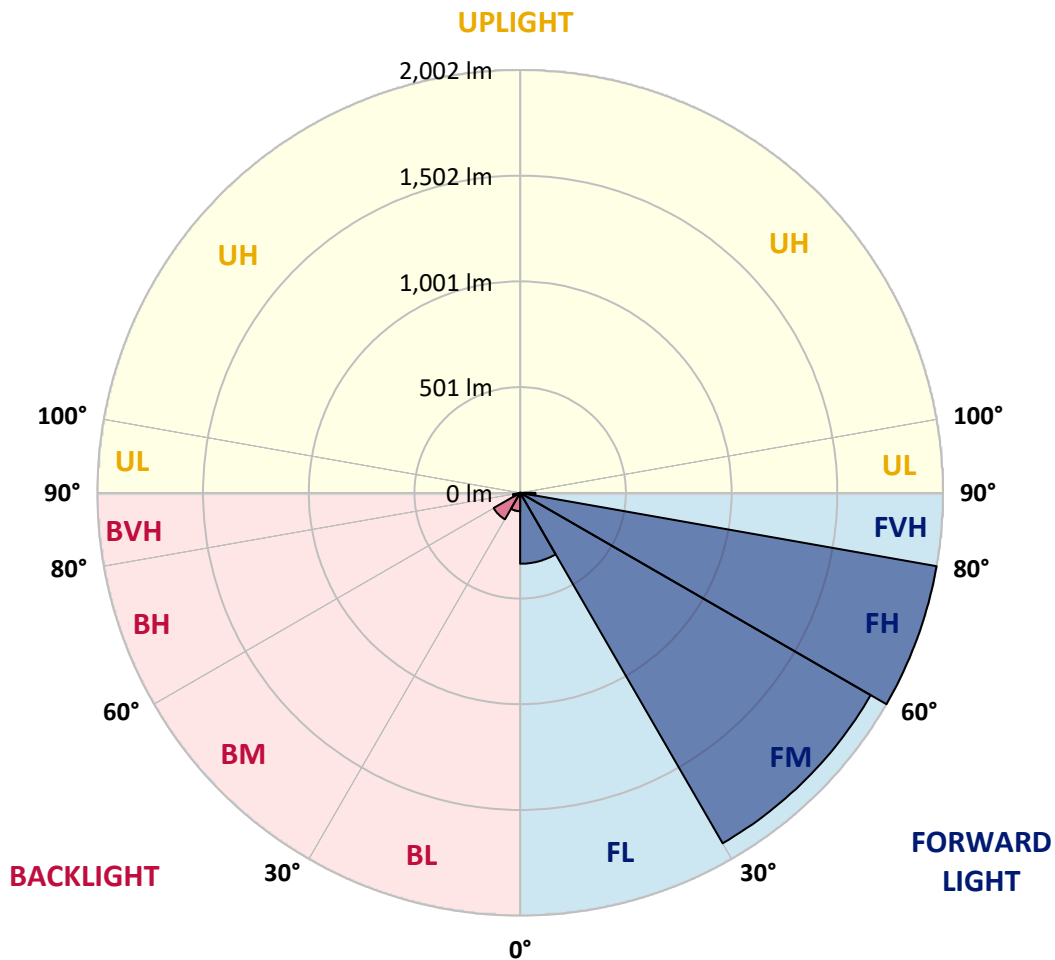
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	336.1	7.3			
FM	(30°-60°)	1916.2	41.7			
FH	(60°-80°)	2002.2	43.6			G2/5000
FVH	(80°-90°)	72.6	1.6			G1/100
BL	(0°-30°)	87.1	1.9	B0/110		
BM	(30°-60°)	144.5	3.1	B0/220		
BH	(60°-80°)	34.9	0.8	B0/110		G0/110
BVH	(80°-90°)	2.4	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6
2.5°	753.9	749.8	747.4	744.1	740.0	736.4	735.1	724.9	715.4	702.2	687.2
5°	767.9	766.5	762.2	757.8	752.8	747.4	744.4	732.3	718.7	699.5	673.2
7.5°	769.3	767.6	762.2	756.1	749.3	742.7	737.5	725.5	712.9	693.5	661.5
10°	767.1	765.2	761.1	754.5	746.0	739.7	734.5	723.0	712.4	694.9	659.3
12.5°	764.6	762.7	760.8	757.5	750.1	745.7	741.4	730.4	720.8	706.1	667.2
15°	767.1	766.0	768.2	766.8	762.7	758.9	754.5	744.6	735.9	723.6	681.7
17.5°	777.5	777.5	784.3	785.1	781.3	775.8	769.5	759.7	752.3	741.9	699.0
20°	801.8	801.0	809.8	811.4	802.1	793.6	784.3	772.3	766.5	760.0	715.9
22.5°	843.7	839.8	845.0	843.4	825.1	811.9	800.5	785.7	782.7	779.7	734.8
25°	898.1	895.9	899.5	883.3	851.1	833.3	819.6	802.9	802.9	805.9	756.1
27.5°	977.2	969.0	956.9	928.5	880.1	857.4	842.6	824.8	829.4	840.7	784.3
30°	1058.1	1049.1	1021.5	977.7	915.3	891.5	874.3	855.7	866.7	887.2	822.1
32.5°	1138.0	1127.9	1088.8	1033.5	966.0	942.2	925.5	905.0	923.3	957.7	877.3
35°	1215.4	1206.4	1161.3	1096.2	1033.3	1013.6	998.2	980.5	1004.0	1052.1	955.3
37.5°	1302.4	1292.6	1237.6	1167.0	1115.0	1100.8	1089.6	1071.8	1112.9	1183.4	1063.9
40°	1409.4	1392.7	1318.6	1248.3	1209.7	1202.9	1195.2	1192.7	1256.5	1354.1	1208.6
42.5°	1532.0	1504.6	1403.4	1333.9	1313.7	1318.6	1316.7	1327.6	1436.2	1566.4	1384.8
45°	1654.5	1619.2	1497.8	1425.3	1428.0	1445.2	1455.9	1499.7	1661.4	1809.9	1574.4
47.5°	1758.5	1723.7	1588.3	1524.0	1556.9	1590.8	1619.8	1702.7	1892.8	2049.5	1721.8
50°	1847.4	1814.6	1684.3	1632.6	1706.5	1761.2	1808.3	1931.1	2141.7	2232.0	1825.2
52.5°	1920.2	1898.3	1783.9	1757.1	1877.5	1957.6	2026.6	2173.7	2362.2	2380.3	1905.7
55°	1991.0	1975.4	1890.9	1905.1	2078.3	2187.4	2274.7	2431.2	2552.1	2503.9	1982.8
57.5°	2072.5	2058.3	2012.9	2092.8	2342.3	2479.6	2574.8	2659.3	2719.2	2630.3	2055.6
60°	2155.7	2147.5	2148.6	2301.2	2645.4	2777.2	2829.8	2851.6	2883.4	2749.3	2059.7
62.5°	2235.0	2250.6	2303.7	2533.2	2935.6	3036.8	3063.4	3085.0	3047.8	2768.2	1902.9
65°	2369.3	2394.8	2521.4	2843.7	3254.9	3363.2	3390.6	3316.4	3073.8	2524.2	1547.8
67.5°	2435.0	2481.5	2707.5	3133.1	3564.5	3684.9	3674.8	3331.5	2758.4	1924.8	993.3
69°	2421.3	2470.8	2750.4	3221.8	3667.4	3776.6	3712.3	3147.4	2349.9	1394.4	609.8
70°	2367.2	2417.2	2728.3	3218.5	3680.5	3767.0	3642.8	2920.0	1986.9	1019.6	381.3
72.5°	1976.8	2020.0	2422.1	2909.1	3390.6	3320.3	3047.5	2023.0	968.1	277.7	85.9
75°	1216.8	1240.9	1738.0	2191.5	2560.8	2380.3	2030.4	1006.4	288.6	78.5	47.6
77.5°	642.9	653.8	951.5	1291.8	1623.3	1343.2	1040.6	392.6	133.0	49.2	34.5
80°	380.0	388.2	512.4	590.6	702.5	586.8	416.1	241.0	95.2	30.9	30.6
82.5°	217.5	222.7	371.5	328.3	276.8	236.4	207.1	228.4	57.2	20.8	31.7
85°	79.9	81.0	209.0	249.8	164.7	97.9	102.9	189.3	15.3	13.1	24.9
87.5°	37.2	36.4	107.5	152.9	96.3	62.1	80.2	41.6	6.0	8.5	6.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6	686.6
2.5°	678.4	668.3	650.0	631.1	612.0	597.2	582.7	571.2	567.4	560.3	560.8
5°	657.6	639.0	600.7	561.9	521.4	488.0	456.6	431.1	418.8	406.2	406.2
7.5°	639.6	612.5	552.6	489.4	424.0	369.0	319.5	282.3	261.8	245.4	245.1
10°	632.8	596.1	512.4	421.8	330.7	255.8	197.0	159.2	139.8	127.2	126.7
12.5°	635.8	590.4	481.5	359.5	245.1	164.4	114.1	89.7	81.5	77.7	77.7
15°	644.5	588.7	450.6	298.5	173.2	102.9	75.8	69.2	68.7	68.7	68.7
17.5°	655.2	589.3	418.8	239.1	117.9	73.6	65.4	64.6	65.1	65.1	65.1
20°	666.1	589.5	384.6	184.1	83.2	64.0	61.6	61.3	61.8	61.8	62.1
22.5°	679.5	590.9	350.4	137.6	68.7	60.5	58.5	58.5	58.8	58.8	58.5
25°	694.9	593.6	314.9	102.0	62.6	58.0	56.4	56.1	56.4	56.1	55.8
27.5°	714.0	597.5	275.2	79.9	59.9	55.5	54.2	54.2	53.9	53.6	53.3
30°	738.1	601.8	230.6	67.8	57.2	53.3	52.0	51.7	51.4	50.9	50.9
32.5°	774.7	611.4	186.6	61.6	54.2	50.3	49.2	49.2	48.7	48.1	47.9
35°	831.1	630.3	147.2	57.7	50.9	47.1	45.7	45.7	45.1	44.9	44.6
37.5°	909.1	659.0	114.4	54.2	47.6	43.5	42.1	41.9	41.3	40.8	40.5
40°	1012.7	694.6	90.0	50.9	44.3	39.9	38.8	38.3	37.2	36.4	36.4
42.5°	1143.0	735.1	73.0	47.3	40.5	36.7	35.8	35.0	33.1	32.3	32.0
45°	1279.2	771.5	61.8	43.2	36.7	33.4	32.8	31.5	29.0	28.2	28.2
47.5°	1377.4	779.9	54.4	39.4	33.1	29.8	29.5	27.1	24.9	24.3	24.1
50°	1438.7	763.2	48.4	35.6	29.8	26.5	25.7	22.7	21.3	20.8	20.5
52.5°	1480.0	733.4	43.5	32.3	26.8	23.5	21.6	19.4	18.3	17.8	17.8
55°	1513.1	691.3	38.6	29.3	24.3	21.1	18.3	16.7	15.6	15.0	15.0
57.5°	1522.4	634.1	33.6	26.8	21.9	18.6	15.6	14.5	13.1	12.9	12.9
60°	1454.8	531.0	29.8	23.8	19.7	16.1	13.7	12.3	10.9	10.7	10.4
62.5°	1276.7	410.9	26.3	21.1	17.2	14.0	11.8	10.1	9.0	9.0	9.0
65°	973.9	275.5	23.0	18.3	15.0	11.8	10.1	8.2	7.7	7.7	7.9
67.5°	583.0	149.9	19.7	15.6	12.9	9.8	8.5	7.1	6.8	7.1	7.1
69°	341.7	88.1	17.8	14.0	11.2	8.8	7.4	6.3	6.8	7.1	7.1
70°	210.9	59.4	16.4	12.6	10.1	7.9	6.8	6.0	6.6	6.8	6.8
72.5°	58.8	30.6	13.1	9.8	8.2	6.6	5.5	5.5	6.3	6.6	6.6
75°	38.3	22.7	10.1	7.4	6.3	5.2	4.7	5.2	6.0	6.3	6.3
77.5°	31.7	18.6	8.2	6.0	5.2	4.9	4.4	4.7	5.5	5.7	5.7
80°	29.0	13.1	6.6	5.5	4.7	4.4	4.1	3.8	4.9	5.2	5.2
82.5°	27.6	10.4	5.7	4.9	4.4	3.8	3.6	3.8	4.4	4.7	4.9
85°	17.2	6.8	5.2	4.7	3.8	3.6	3.6	3.6	4.1	4.4	4.4
87.5°	6.3	5.5	4.7	3.8	3.3	3.3	3.3	3.3	3.6	4.1	4.1
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)