

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: P299638

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299638  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
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-SL2-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3788.3 lumens  
Efficiency: N/A  
Efficacy: 86.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - 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

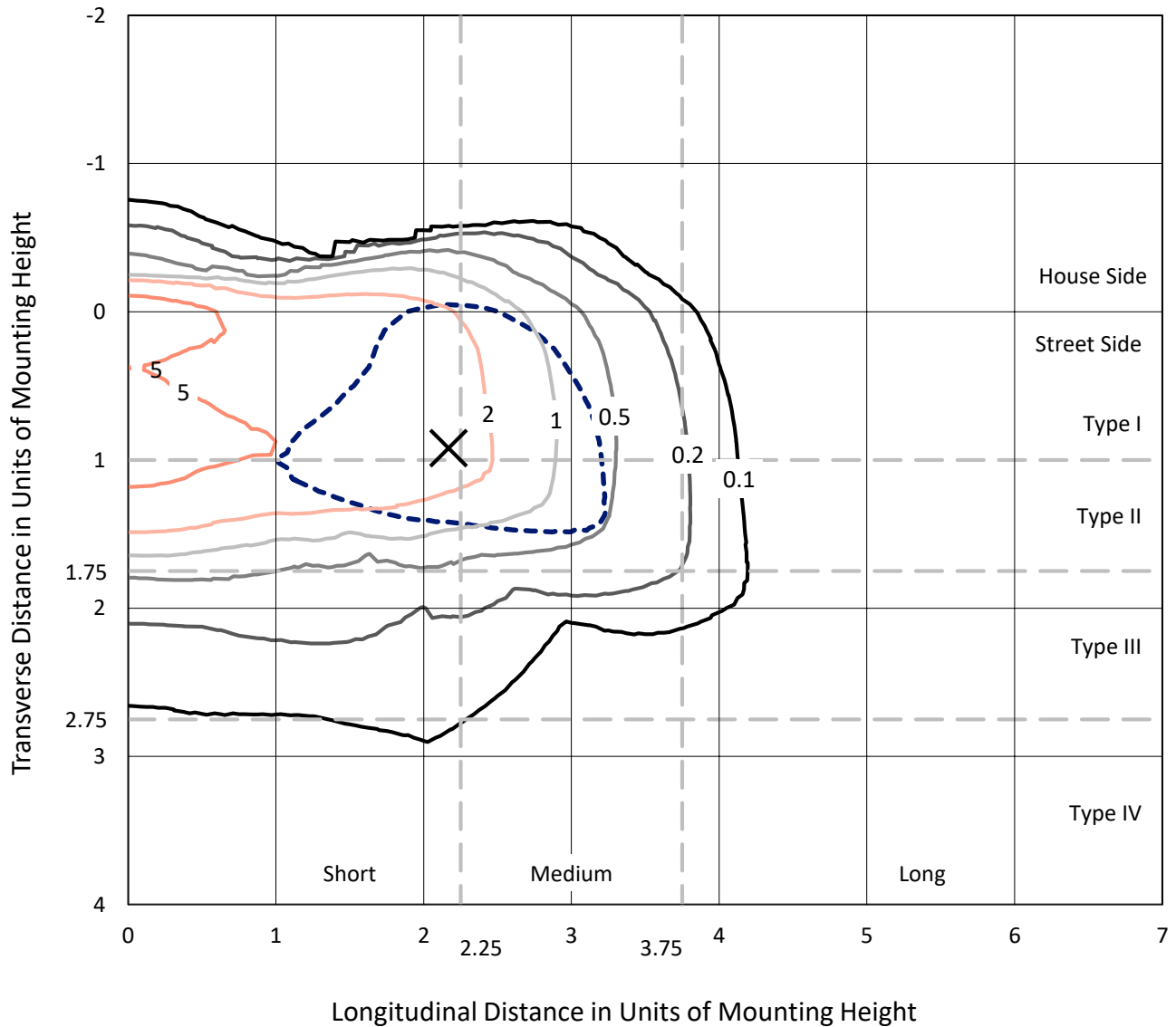


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

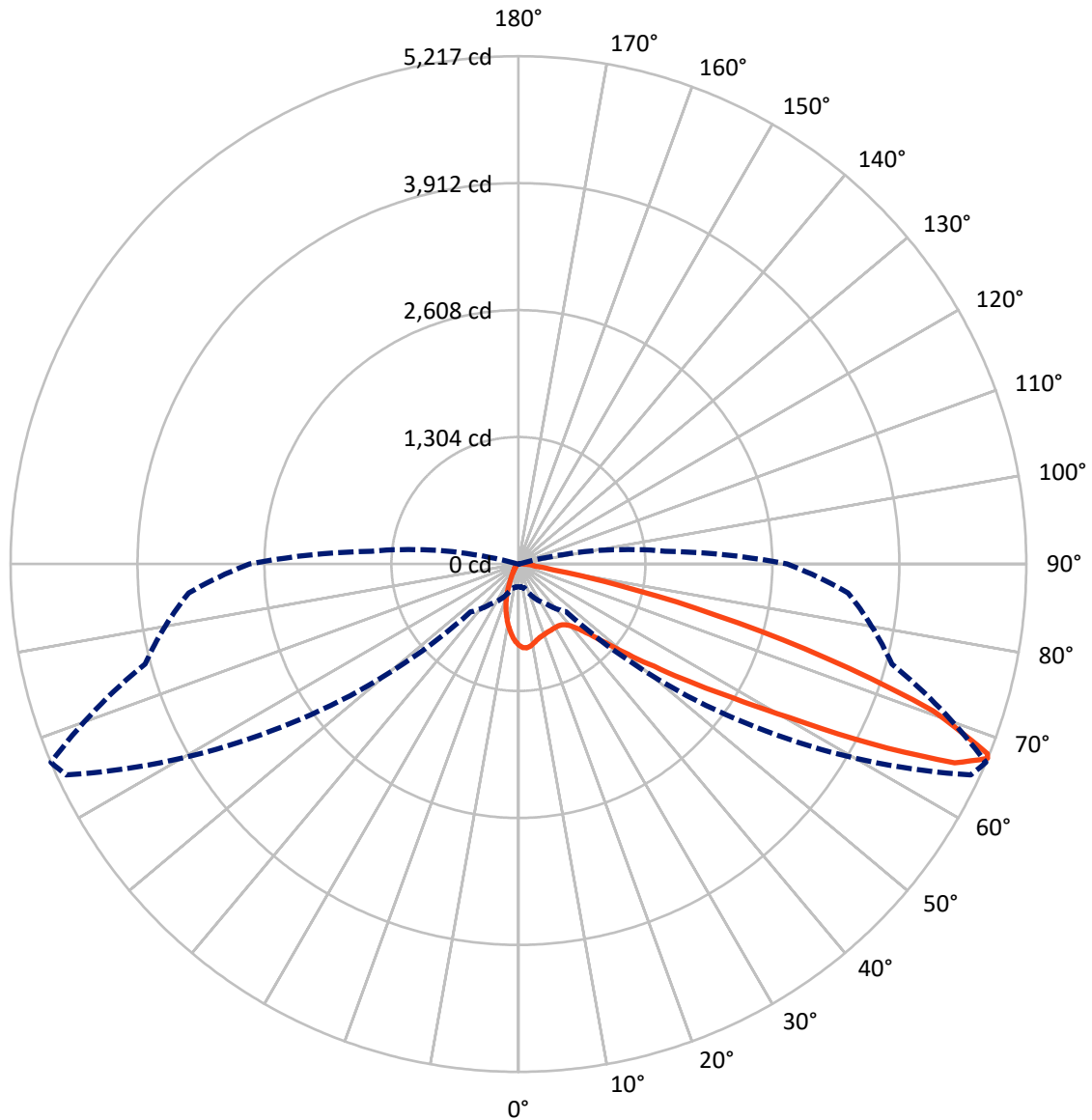


Based on 10 foot mounting height. Maximum calculated value = 8.4 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	393.3	0.0	393.3
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	3394.9	0.0	3394.9
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	3788.3	0.0	3788.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	1.8
10°-20°	144.7	3.8
20°-30°	210.4	5.6
30°-40°	328.2	8.7
40°-50°	581.3	15.3
50°-60°	919.9	24.3
60°-70°	1053.6	27.8
70°-80°	437.0	11.5
80°-90°	45.1	1.2
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°	3788.3	100.0
0°-180°	3788.3	100.0



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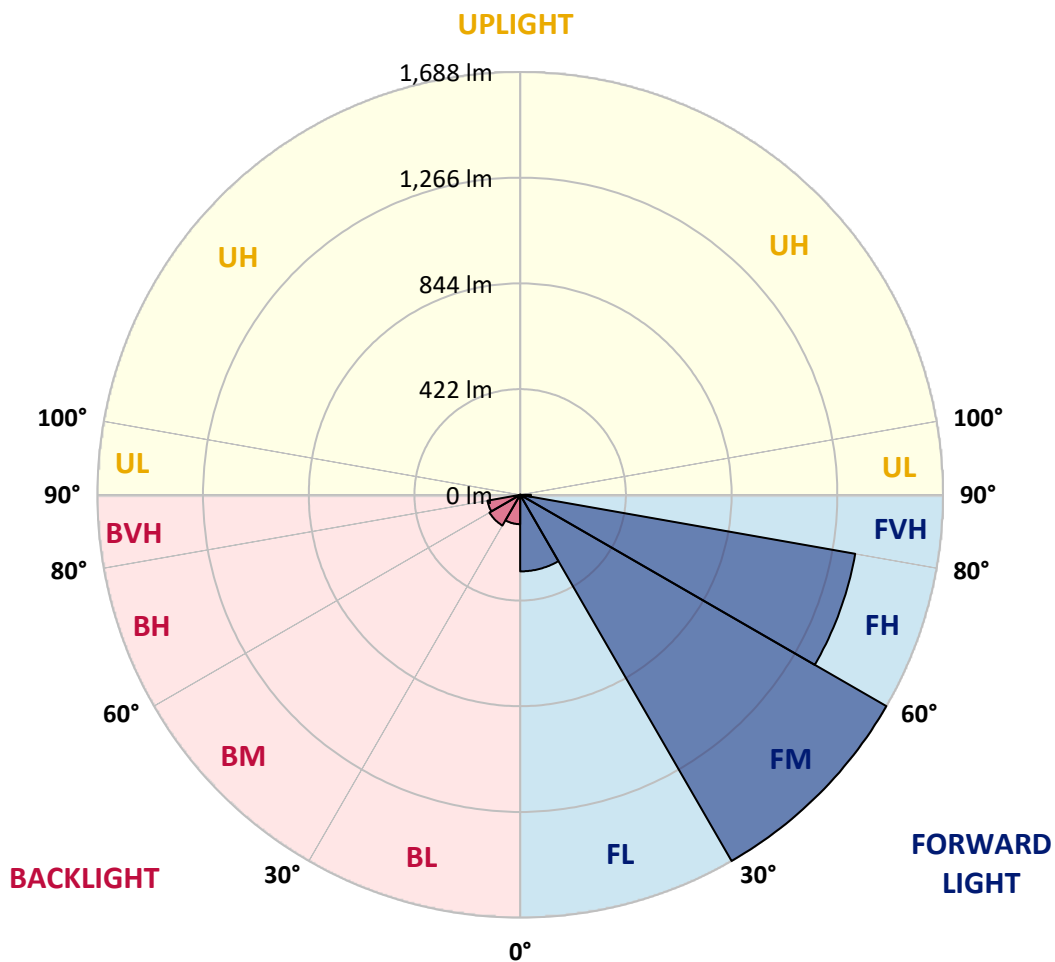
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	305.7	8.1			
FM	(30°-60°)	1688.1	44.6			
FH	(60°-80°)	1358.1	35.9			G1/1800
FVH	(80°-90°)	43.1	1.1			G1/100
BL	(0°-30°)	117.4	3.1	B1/500		
BM	(30°-60°)	141.4	3.7	B0/220		
BH	(60°-80°)	132.6	3.5	B1/500		G1/500
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: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4
2.5°	863.7	865.5	865.3	866.6	869.7	869.9	866.8	860.9	859.5	851.8	838.3
5°	796.6	801.6	804.7	817.3	831.5	848.5	861.3	865.9	865.3	859.8	839.4
7.5°	719.9	725.0	728.5	743.3	762.1	791.3	824.6	852.0	854.5	860.4	838.5
10°	668.8	669.7	674.6	688.7	708.4	738.2	778.0	825.9	833.2	855.1	836.3
12.5°	626.9	627.5	633.9	649.2	670.2	700.2	742.0	797.4	808.7	848.5	835.9
15°	597.0	599.5	605.2	621.1	643.4	673.3	716.1	776.5	789.9	846.1	839.9
17.5°	587.1	589.7	591.5	603.0	623.3	652.5	696.5	762.8	778.0	847.4	847.6
20°	597.5	599.5	595.5	598.4	611.0	637.0	679.9	751.0	769.2	848.9	857.5
22.5°	636.1	637.0	626.2	613.6	611.4	625.8	666.9	741.8	761.2	853.1	869.3
25°	702.4	700.9	683.2	656.0	630.4	623.8	659.1	736.0	757.2	857.5	881.4
27.5°	782.4	784.6	760.3	720.8	671.9	637.0	658.0	733.6	755.5	860.6	892.0
30°	879.6	882.7	854.9	805.2	735.1	669.7	668.2	733.1	754.4	858.7	892.9
32.5°	978.9	982.6	960.7	909.5	819.5	724.5	691.2	738.0	756.6	851.8	887.8
35°	1082.7	1088.0	1073.4	1029.5	934.0	803.6	731.6	752.8	767.0	851.1	882.7
37.5°	1226.1	1231.0	1203.6	1156.9	1072.5	909.7	796.6	780.7	791.5	861.7	884.1
40°	1440.2	1439.6	1368.8	1297.5	1224.8	1044.5	887.8	831.0	836.6	893.8	900.4
42.5°	1673.6	1672.4	1567.9	1459.4	1393.8	1210.4	1007.8	918.1	914.3	952.8	942.8
45°	1853.4	1853.2	1767.9	1645.7	1597.3	1400.9	1162.9	1039.2	1033.4	1048.7	1021.1
47.5°	1930.1	1931.4	1888.5	1802.6	1822.9	1658.5	1358.5	1214.6	1206.0	1199.8	1157.8
50°	1870.4	1873.1	1876.6	1859.8	1988.4	2004.8	1620.7	1461.9	1457.7	1430.1	1364.4
52.5°	1675.5	1689.0	1730.6	1783.8	2045.9	2337.1	2031.9	1769.0	1746.5	1717.1	1644.8
55°	1347.2	1362.0	1440.9	1570.1	1960.4	2555.4	2608.2	2165.0	2127.4	2039.7	1935.4
57.5°	891.6	914.6	1029.0	1193.4	1712.0	2590.5	3183.2	2714.5	2583.7	2343.5	2226.0
60°	491.2	513.3	637.5	786.4	1236.5	2416.9	3569.8	3430.0	3198.8	2683.1	2578.8
62.5°	302.5	314.4	406.1	544.7	741.5	1907.5	3649.8	4329.0	4061.5	3120.4	3005.1
65°	240.8	245.9	290.8	445.2	531.6	1134.6	3391.5	5014.5	4925.2	3649.8	3386.7
67°	233.8	235.8	257.0	382.3	501.1	695.6	2841.3	5126.1	5216.6	3970.2	3398.6
67.5°	235.3	237.5	257.6	364.8	500.3	639.2	2651.7	5082.1	5196.5	3995.6	3345.8
70°	226.9	233.8	295.0	364.6	475.7	531.2	1588.0	4403.3	4522.4	3712.6	2838.9
72.5°	80.4	80.9	127.5	295.0	517.3	536.9	797.4	3228.0	3316.2	2840.0	2046.8
75°	47.7	40.7	42.4	84.0	494.3	521.5	460.0	2062.7	2095.6	1627.4	1036.5
77.5°	32.9	28.7	29.6	37.1	188.3	514.2	365.5	1075.6	1040.5	570.7	220.7
80°	18.8	16.6	17.7	32.5	68.5	479.7	344.7	436.2	371.9	96.8	61.0
82.5°	9.9	8.4	10.2	26.7	47.7	299.0	345.4	210.8	167.0	32.7	41.5
85°	3.5	2.9	4.9	18.3	31.8	91.7	320.2	177.2	139.2	15.9	31.6
87.5°	0.7	0.7	2.0	7.5	12.8	28.1	189.4	105.2	70.5	9.5	21.7
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°	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4	835.4
2.5°	832.8	823.3	810.5	794.8	776.2	759.9	747.7	735.1	732.5	728.1	727.4
5°	827.3	810.9	779.1	742.6	703.8	668.6	640.1	614.7	603.4	593.7	592.6
7.5°	819.1	794.6	740.4	681.7	620.9	565.7	518.8	485.7	455.2	440.6	438.4
10°	809.6	774.5	696.9	615.4	531.4	453.4	383.8	325.5	290.1	269.1	266.5
12.5°	800.8	754.8	652.5	546.7	435.1	330.8	241.3	185.6	148.5	133.5	131.7
15°	796.6	738.9	611.0	476.4	334.3	210.6	131.9	102.1	89.9	86.4	86.2
17.5°	796.1	725.4	570.3	403.7	234.2	122.4	86.0	78.4	76.0	75.1	75.1
20°	795.9	712.6	529.6	328.3	148.7	81.5	71.6	69.8	68.1	67.0	67.0
22.5°	798.3	701.1	487.2	251.5	93.7	66.1	63.0	61.2	59.0	57.4	57.2
25°	800.8	692.3	443.9	179.0	67.8	57.4	54.4	51.9	48.8	46.8	46.6
27.5°	801.2	681.2	397.5	119.8	56.8	50.2	46.2	42.4	38.9	36.9	36.7
30°	794.6	662.7	346.0	80.9	50.2	43.5	38.2	34.2	30.9	29.4	29.4
32.5°	781.5	639.7	289.5	61.0	44.6	37.3	31.6	27.8	25.6	25.0	24.7
35°	769.8	614.9	231.3	51.7	40.0	31.6	25.9	23.4	22.1	21.9	21.7
37.5°	763.0	595.0	176.8	46.8	35.6	26.5	21.9	20.1	19.4	19.0	19.2
40°	768.3	578.5	130.6	42.9	31.2	22.1	18.6	17.7	17.0	16.8	16.8
42.5°	791.5	575.6	97.0	39.3	27.0	18.3	16.1	15.5	15.0	14.8	15.0
45°	852.5	593.3	75.3	36.0	22.8	15.5	13.7	13.5	13.3	13.3	13.3
47.5°	944.2	629.7	62.8	32.3	19.0	13.3	11.9	11.7	11.5	11.7	11.7
50°	1099.5	696.5	56.1	28.5	15.7	11.3	10.2	10.2	10.2	10.2	10.4
52.5°	1335.7	827.7	51.7	24.7	12.8	9.5	8.6	8.6	8.8	8.8	9.1
55°	1598.9	1001.8	47.7	21.0	10.8	8.0	7.1	7.3	7.5	7.7	7.7
57.5°	1884.3	1194.7	44.4	17.2	9.3	6.4	6.0	6.2	6.4	6.8	6.8
60°	2228.8	1403.5	39.6	13.5	7.7	5.1	4.6	5.1	5.7	6.2	6.4
62.5°	2607.1	1605.5	33.4	10.6	6.4	4.0	3.8	4.6	5.5	6.0	6.2
65°	2865.6	1668.9	25.6	8.6	4.9	2.9	3.1	4.2	5.3	6.0	6.0
67°	2760.9	1513.1	21.0	7.3	4.0	2.2	2.9	4.2	5.3	5.7	6.0
67.5°	2688.2	1452.1	20.1	7.1	3.8	2.2	2.9	4.2	5.3	6.0	6.0
70°	2187.3	1090.9	16.8	5.3	3.1	2.0	2.4	4.0	5.1	5.7	5.7
72.5°	1519.8	672.6	15.0	3.8	2.7	1.8	2.2	3.8	4.9	5.5	5.7
75°	722.5	243.5	12.8	2.9	2.4	1.5	2.0	3.8	4.9	5.5	5.5
77.5°	147.4	56.6	10.4	2.4	2.0	1.5	1.8	3.5	4.6	5.3	5.3
80°	48.4	21.9	7.7	2.2	2.0	1.5	1.8	3.3	4.6	5.1	5.3
82.5°	34.9	11.0	5.1	2.2	2.0	1.5	1.5	3.3	4.4	5.1	5.1
85°	26.7	7.7	3.3	2.2	2.0	1.5	1.5	3.1	4.2	4.9	4.9
87.5°	17.7	3.1	2.7	2.2	2.0	1.5	1.5	3.1	4.0	4.6	4.9
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)