

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: P299575

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299575
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-SL2-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA 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: 4074.1 lumens
Efficiency: N/A
Efficacy: 69.1 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): 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

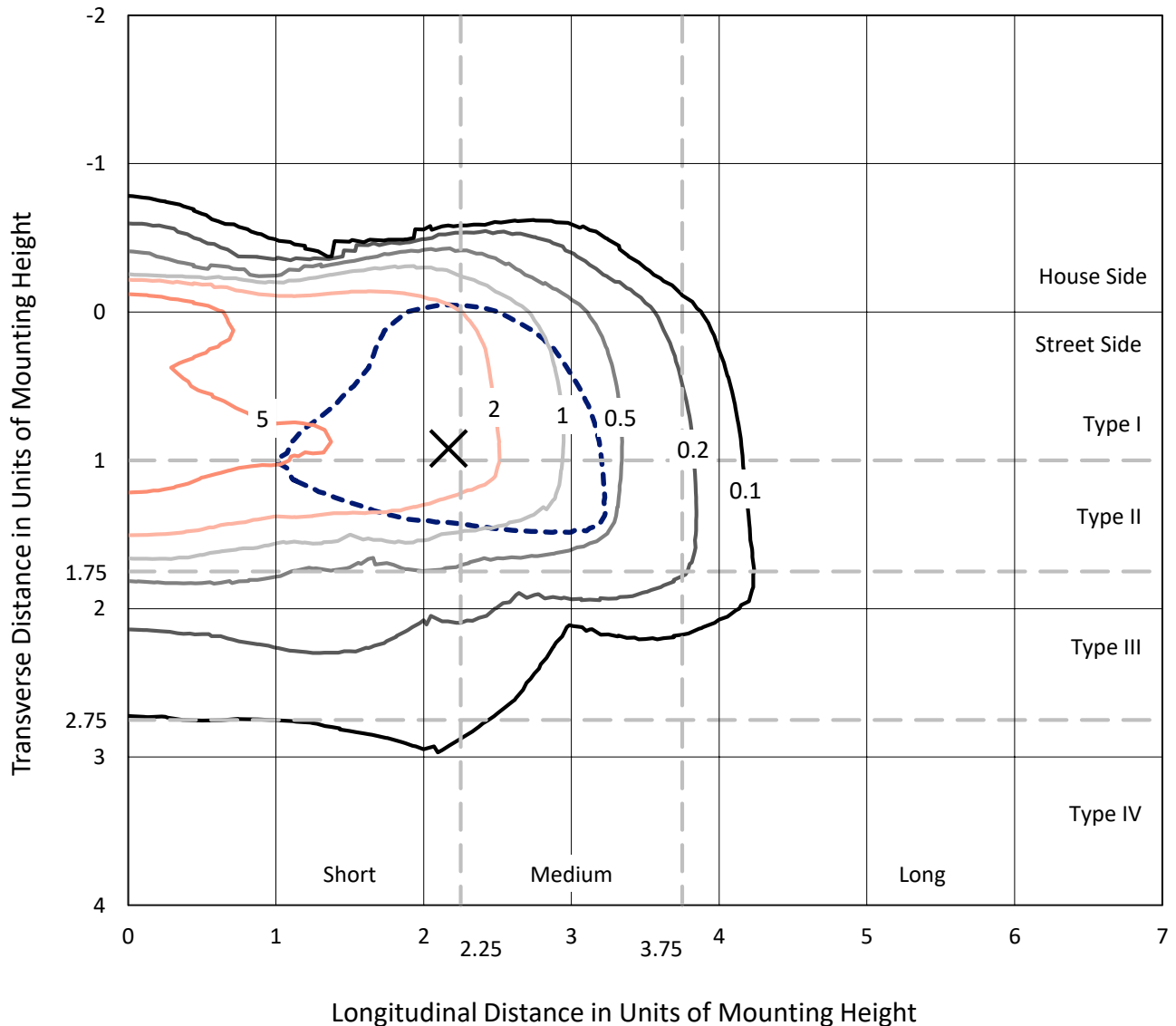


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Iso-Footcandle Lines of Horizontal Illumination

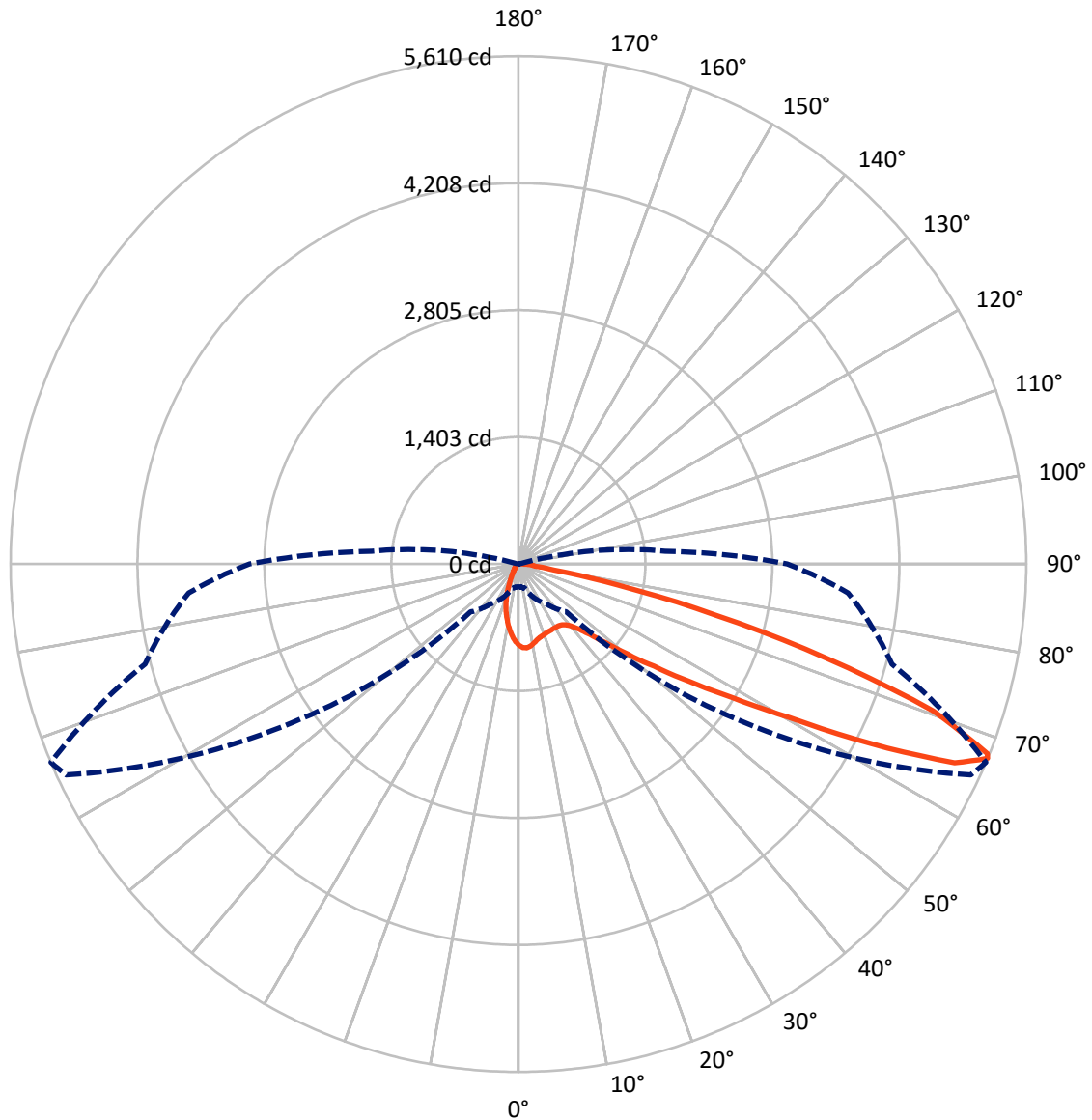
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 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
House Side	Lumens	423.0	0.0	423.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	3651.1	0.0	3651.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	4074.1	0.0	4074.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.8
10°-20°	155.6	3.8
20°-30°	226.2	5.6
30°-40°	352.9	8.7
40°-50°	625.2	15.3
50°-60°	989.3	24.3
60°-70°	1133.1	27.8
70°-80°	470.0	11.5
80°-90°	48.6	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°	4074.1	100.0
0°-180°	4074.1	100.0



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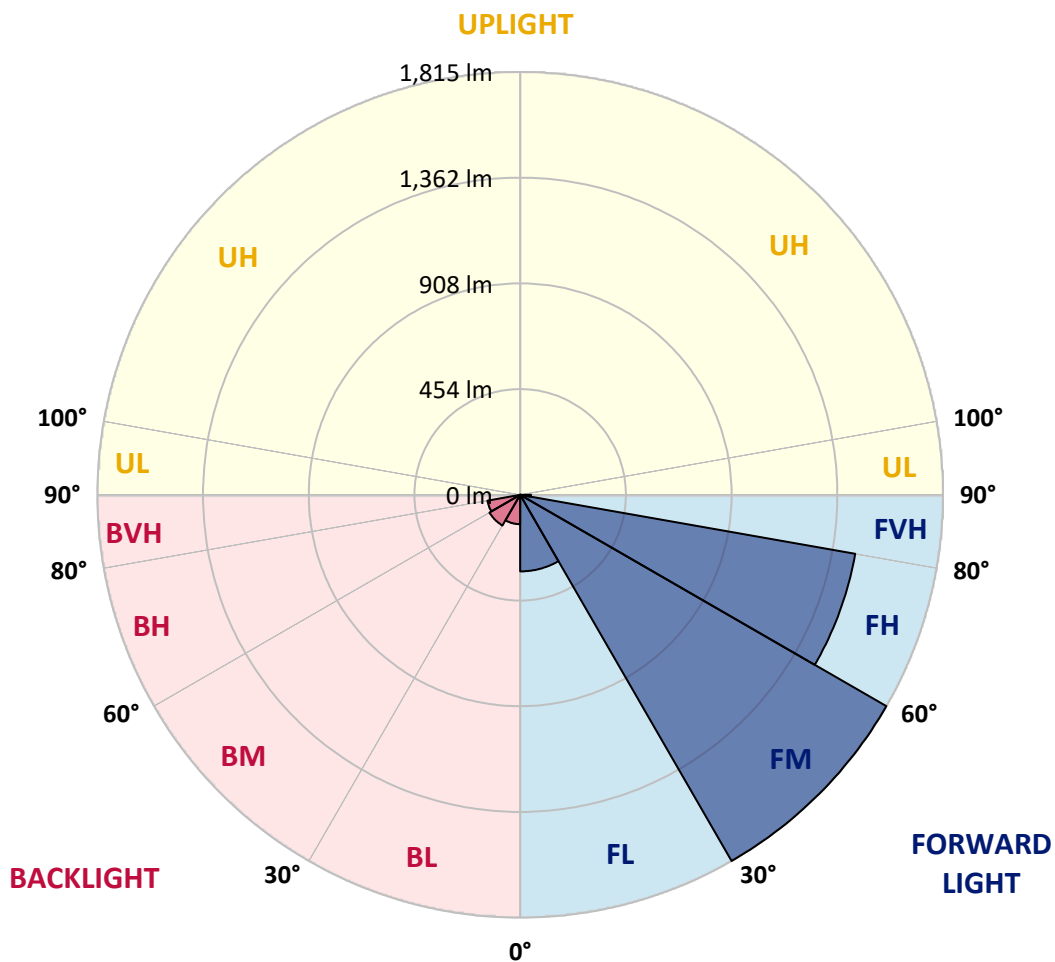
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	328.7	8.1			
FM	(30°-60°)	1815.4	44.6			
FH	(60°-80°)	1460.6	35.9			G1/1800
FVH	(80°-90°)	46.4	1.1			G1/100
BL	(0°-30°)	126.2	3.1	B1/500		
BM	(30°-60°)	152.0	3.7	B0/220		
BH	(60°-80°)	142.6	3.5	B1/500		G1/500
BVH	(80°-90°)	2.2	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°	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5
2.5°	928.9	930.8	930.6	932.0	935.3	935.6	932.2	925.8	924.4	916.1	901.6
5°	856.7	862.1	865.5	879.0	894.2	912.5	926.3	931.3	930.6	924.6	902.8
7.5°	774.2	779.7	783.5	799.4	819.6	851.0	886.8	916.3	918.9	925.3	901.8
10°	719.3	720.3	725.5	740.7	761.8	793.9	836.7	888.3	896.1	919.6	899.4
12.5°	674.2	674.9	681.8	698.2	720.7	753.1	798.0	857.6	869.7	912.5	899.0
15°	642.1	644.7	650.9	668.0	692.0	724.1	770.2	835.0	849.5	909.9	903.2
17.5°	631.4	634.2	636.1	648.5	670.4	701.7	749.0	820.3	836.7	911.3	911.6
20°	642.6	644.7	640.4	643.5	657.1	685.1	731.2	807.7	827.2	913.0	922.3
22.5°	684.1	685.1	673.5	659.9	657.5	673.0	717.2	797.7	818.6	917.5	934.8
25°	755.4	753.8	734.8	705.5	678.0	670.8	708.9	791.6	814.4	922.3	947.9
27.5°	841.5	843.8	817.7	775.2	722.6	685.1	707.7	788.9	812.5	925.6	959.3
30°	946.0	949.3	919.4	865.9	790.6	720.3	718.6	788.5	811.3	923.4	960.3
32.5°	1052.7	1056.8	1033.2	978.1	881.4	779.2	743.3	793.7	813.7	916.1	954.8
35°	1164.4	1170.1	1154.4	1107.1	1004.5	864.3	786.8	809.6	824.8	915.4	949.3
37.5°	1318.6	1323.8	1294.4	1244.2	1153.5	978.3	856.7	839.6	851.2	926.8	950.8
40°	1548.9	1548.2	1472.1	1395.4	1317.2	1123.3	954.8	893.7	899.7	961.2	968.4
42.5°	1799.8	1798.6	1686.2	1569.6	1499.0	1301.8	1083.8	987.4	983.3	1024.7	1014.0
45°	1993.3	1993.0	1901.3	1769.9	1717.8	1506.6	1250.7	1117.6	1111.4	1127.8	1098.1
47.5°	2075.7	2077.1	2031.0	1938.6	1960.5	1783.7	1461.0	1306.3	1297.0	1290.3	1245.2
50°	2011.6	2014.4	2018.2	2000.2	2138.5	2156.0	1743.0	1572.2	1567.7	1538.0	1467.4
52.5°	1802.0	1816.5	1861.1	1918.4	2200.2	2513.4	2185.3	1902.5	1878.2	1846.6	1768.9
55°	1448.8	1464.8	1549.6	1688.6	2108.3	2748.2	2805.0	2328.3	2287.9	2193.6	2081.4
57.5°	958.8	983.6	1106.7	1283.5	1841.2	2786.0	3423.3	2919.3	2778.6	2520.3	2393.9
60°	528.3	552.0	685.6	845.7	1329.8	2599.2	3839.2	3688.8	3440.2	2885.6	2773.4
62.5°	325.3	338.2	436.8	585.8	797.5	2051.5	3925.2	4655.7	4367.9	3355.8	3231.8
65°	259.0	264.5	312.7	478.8	571.7	1220.2	3647.4	5392.8	5296.8	3925.2	3642.2
67°	251.4	253.6	276.4	411.1	539.0	748.1	3055.7	5512.8	5610.3	4269.8	3655.0
67.5°	253.1	255.5	277.1	392.3	538.0	687.5	2851.8	5465.5	5588.6	4297.1	3598.2
70°	244.0	251.4	317.2	392.1	511.6	571.3	1707.9	4735.5	4863.6	3992.7	3053.1
72.5°	86.5	87.0	137.1	317.2	556.3	577.4	857.6	3471.6	3566.4	3054.3	2201.2
75°	51.3	43.7	45.6	90.3	531.6	560.8	494.8	2218.3	2253.7	1750.2	1114.7
77.5°	35.4	30.9	31.8	39.9	202.5	553.0	393.0	1156.8	1119.0	613.8	237.4
80°	20.2	17.8	19.0	34.9	73.7	515.9	370.7	469.1	399.9	104.1	65.6
82.5°	10.7	9.0	10.9	28.8	51.3	321.5	371.4	226.7	179.7	35.2	44.7
85°	3.8	3.1	5.2	19.7	34.2	98.6	344.3	190.6	149.7	17.1	34.0
87.5°	0.7	0.7	2.1	8.1	13.8	30.2	203.7	113.1	75.8	10.2	23.3
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°	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5	898.5
2.5°	895.6	885.4	871.6	854.8	834.8	817.2	804.1	790.6	787.8	783.0	782.3
5°	889.7	872.1	837.9	798.7	756.9	719.1	688.4	661.1	649.0	638.5	637.3
7.5°	880.9	854.5	796.3	733.1	667.7	608.3	558.0	522.3	489.5	473.8	471.5
10°	870.7	832.9	749.5	661.8	571.5	487.6	412.8	350.0	312.0	289.4	286.6
12.5°	861.2	811.8	701.7	587.9	467.9	355.7	259.5	199.6	159.7	143.5	141.6
15°	856.7	794.6	657.1	512.3	359.5	226.5	141.9	109.8	96.7	92.9	92.7
17.5°	856.2	780.1	613.3	434.2	251.9	131.6	92.4	84.4	81.7	80.8	80.8
20°	856.0	766.4	569.6	353.1	159.9	87.7	77.0	75.1	73.2	72.0	72.0
22.5°	858.6	754.0	524.0	270.4	100.8	71.1	67.7	65.8	63.4	61.8	61.5
25°	861.2	744.5	477.4	192.5	73.0	61.8	58.5	55.8	52.5	50.4	50.1
27.5°	861.7	732.6	427.5	128.8	61.1	53.9	49.7	45.6	41.8	39.7	39.4
30°	854.5	712.7	372.1	87.0	53.9	46.8	41.1	36.8	33.3	31.6	31.6
32.5°	840.5	687.9	311.3	65.6	48.0	40.2	34.0	29.9	27.6	26.9	26.6
35°	827.9	661.3	248.8	55.6	43.0	34.0	27.8	25.2	23.8	23.5	23.3
37.5°	820.5	639.9	190.1	50.4	38.3	28.5	23.5	21.6	20.9	20.4	20.7
40°	826.2	622.1	140.4	46.1	33.5	23.8	20.0	19.0	18.3	18.1	18.1
42.5°	851.2	619.0	104.3	42.3	29.0	19.7	17.3	16.6	16.2	15.9	16.2
45°	916.8	638.0	81.0	38.7	24.5	16.6	14.7	14.5	14.3	14.3	14.3
47.5°	1015.4	677.3	67.5	34.7	20.4	14.3	12.8	12.6	12.4	12.6	12.6
50°	1182.5	749.0	60.4	30.7	16.9	12.1	10.9	10.9	10.9	10.9	11.2
52.5°	1436.5	890.2	55.6	26.6	13.8	10.2	9.3	9.3	9.5	9.5	9.7
55°	1719.5	1077.4	51.3	22.6	11.6	8.6	7.6	7.8	8.1	8.3	8.3
57.5°	2026.5	1284.9	47.8	18.5	10.0	6.9	6.4	6.7	6.9	7.4	7.4
60°	2397.0	1509.4	42.5	14.5	8.3	5.5	5.0	5.5	6.2	6.7	6.9
62.5°	2803.8	1726.6	35.9	11.4	6.9	4.3	4.0	5.0	5.9	6.4	6.7
65°	3081.9	1794.8	27.6	9.3	5.2	3.1	3.3	4.5	5.7	6.4	6.4
67°	2969.2	1627.3	22.6	7.8	4.3	2.4	3.1	4.5	5.7	6.2	6.4
67.5°	2891.0	1561.7	21.6	7.6	4.0	2.4	3.1	4.5	5.7	6.4	6.4
70°	2352.3	1173.2	18.1	5.7	3.3	2.1	2.6	4.3	5.5	6.2	6.2
72.5°	1634.4	723.4	16.2	4.0	2.9	1.9	2.4	4.0	5.2	5.9	6.2
75°	777.1	261.9	13.8	3.1	2.6	1.7	2.1	4.0	5.2	5.9	5.9
77.5°	158.5	60.8	11.2	2.6	2.1	1.7	1.9	3.8	5.0	5.7	5.7
80°	52.0	23.5	8.3	2.4	2.1	1.7	1.9	3.6	5.0	5.5	5.7
82.5°	37.5	11.9	5.5	2.4	2.1	1.7	1.7	3.6	4.8	5.5	5.5
85°	28.8	8.3	3.6	2.4	2.1	1.7	1.7	3.3	4.5	5.2	5.2
87.5°	19.0	3.3	2.9	2.4	2.1	1.7	1.7	3.3	4.3	5.0	5.2
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)