

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: P299995

Luminaire Tested: **GLNA-AF-01-LED-E1-SL3-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7027-600-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2768.2 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 34  
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

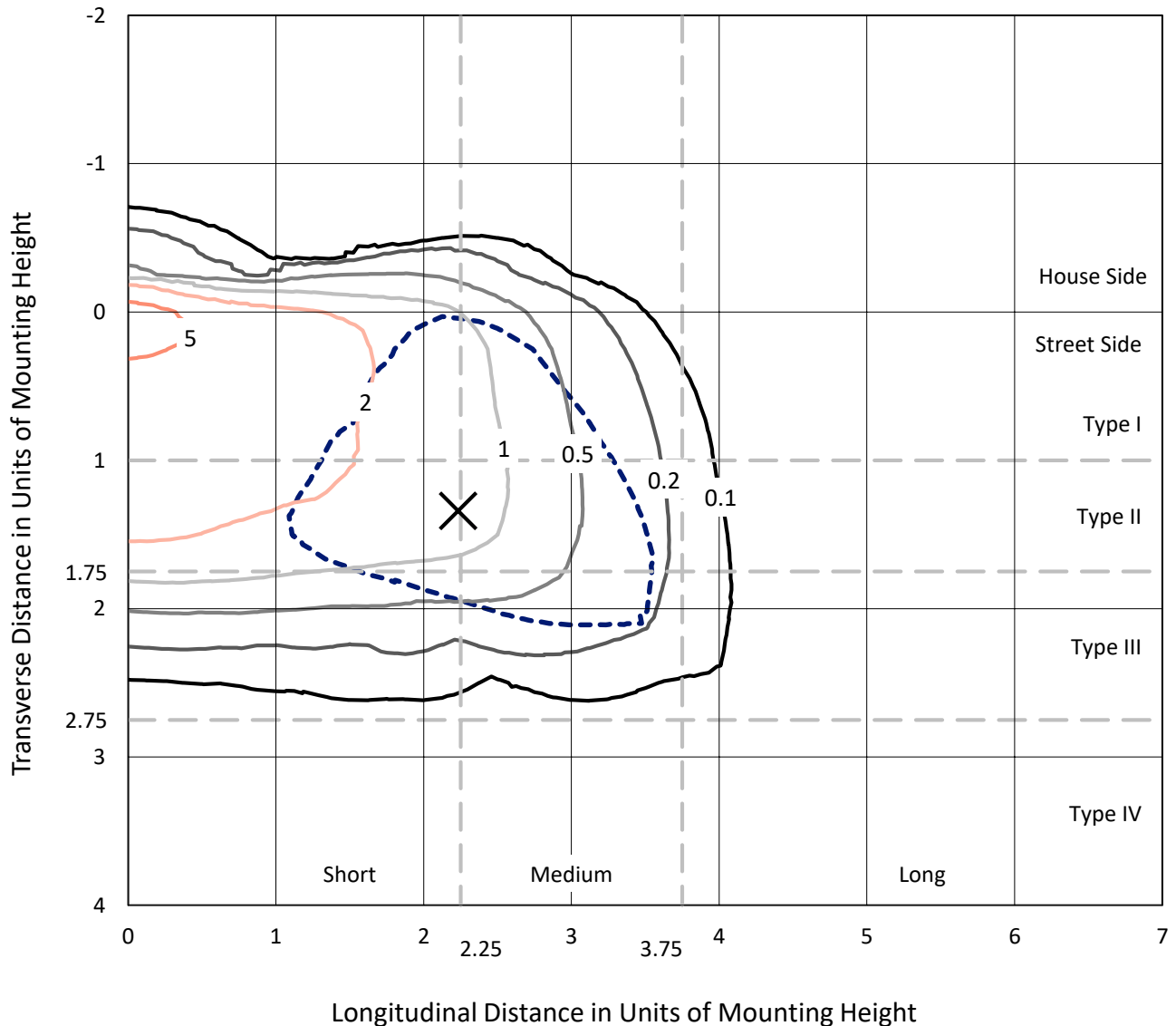


REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

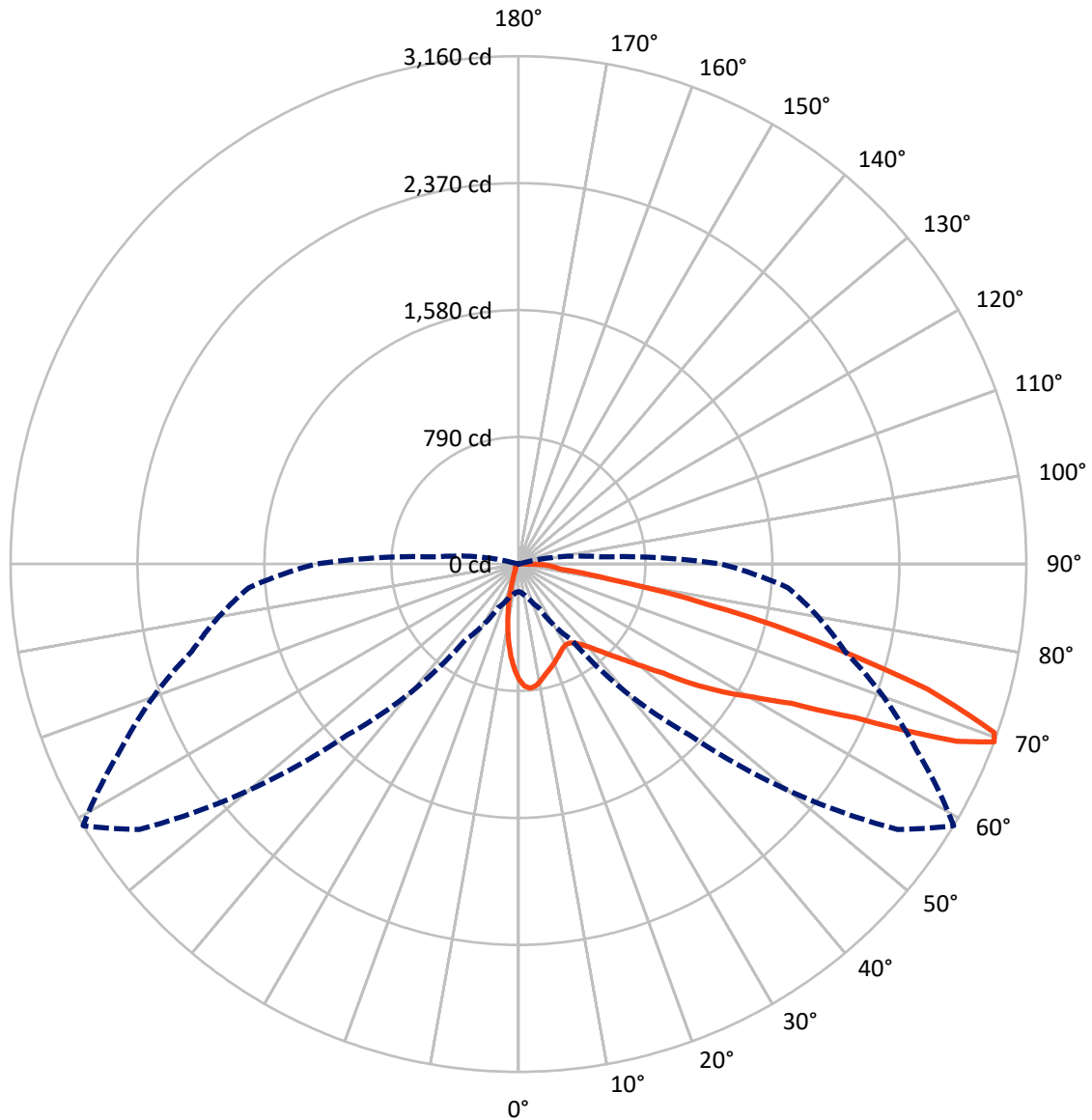


Based on 10 foot mounting height. Maximum calculated value = 7.2 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	225.4	0.0	225.4
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	2542.8	0.0	2542.8
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	2768.2	0.0	2768.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.5	2.1
10°-20°	120.8	4.4
20°-30°	162.6	5.9
30°-40°	236.1	8.5
40°-50°	393.1	14.2
50°-60°	613.3	22.2
60°-70°	758.9	27.4
70°-80°	384.6	13.9
80°-90°	40.2	1.5
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°	2768.2	100.0
0°-180°	2768.2	100.0



REPORT NUMBER: P299995

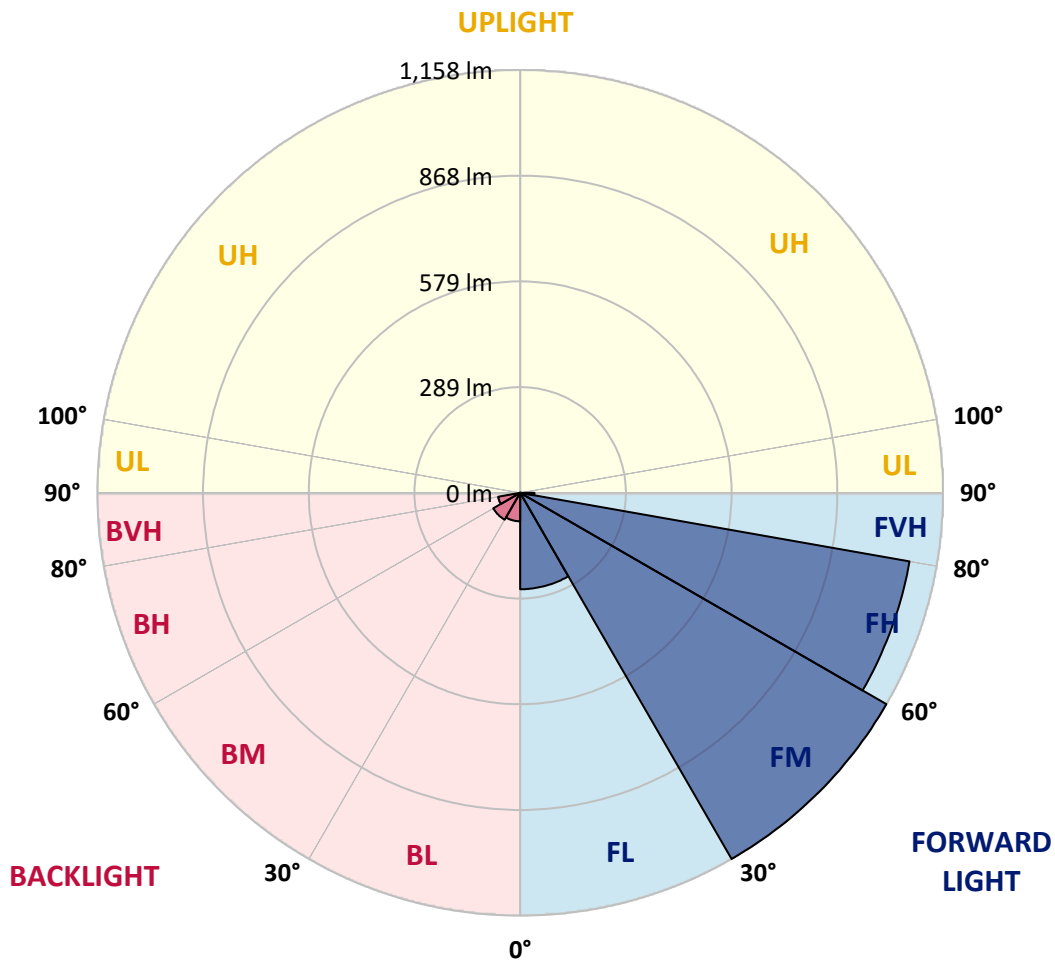
CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	263.9	9.5			
FM	(30°-60°)	1157.6	41.8			
FH	(60°-80°)	1082.3	39.1			G1/1800
FVH	(80°-90°)	39.0	1.4			G1/100
BL	(0°-30°)	78.0	2.8	B0/110		
BM	(30°-60°)	84.9	3.1	B0/220		
BH	(60°-80°)	61.2	2.2	B0/110		G0/110
BVH	(80°-90°)	1.2	0.0			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 III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	789.7	789.4	786.0	784.4	781.6	775.6	766.4	761.6	753.7	740.1	721.8
5°	782.5	786.3	788.3	788.5	790.5	788.3	780.0	776.0	765.2	743.2	710.4
7.5°	733.7	735.1	740.9	745.9	755.6	764.8	767.8	766.1	759.7	736.2	692.5
10°	681.4	682.8	689.7	696.3	709.4	723.6	738.7	741.8	744.5	726.2	675.3
12.5°	636.3	637.7	644.8	653.4	668.7	686.3	709.6	714.7	726.5	716.6	661.5
15°	597.5	598.1	605.0	615.6	634.0	656.5	683.0	691.3	709.3	709.9	649.5
17.5°	564.5	566.0	570.3	580.4	600.5	628.3	659.2	671.1	692.2	704.3	637.7
20°	544.3	545.8	545.7	551.3	569.3	599.1	635.4	649.6	675.3	698.5	627.3
22.5°	540.4	540.4	536.3	535.5	546.2	571.0	610.7	628.0	660.1	696.0	619.9
25°	554.3	553.6	543.5	535.2	535.7	550.5	586.7	607.3	647.3	697.7	616.0
27.5°	583.7	582.9	570.1	554.3	541.6	541.5	568.5	590.8	637.1	705.8	617.5
30°	624.4	624.1	610.2	590.3	567.3	546.2	562.3	582.5	630.5	720.5	621.1
32.5°	668.9	668.4	657.9	637.0	607.8	567.3	568.9	585.8	632.4	740.1	629.9
35°	716.0	715.2	710.7	692.4	660.3	606.3	590.5	603.6	644.3	769.4	647.1
37.5°	767.0	767.8	771.1	753.6	719.9	660.9	626.6	635.5	668.2	809.1	675.1
40°	842.3	842.2	843.3	820.2	787.9	727.7	677.2	680.0	708.3	861.9	717.7
42.5°	979.0	969.4	940.5	893.5	860.9	804.1	740.9	737.9	757.3	927.2	777.3
45°	1162.6	1142.2	1067.1	977.1	935.4	890.2	819.3	809.8	822.1	1005.6	850.9
47.5°	1320.5	1299.4	1193.1	1064.1	1014.5	971.9	911.2	894.0	898.1	1093.4	944.2
50°	1374.2	1363.9	1271.1	1139.9	1091.0	1074.8	1017.8	996.8	991.0	1195.0	1052.4
52.5°	1355.6	1354.8	1293.0	1189.1	1161.2	1181.2	1151.9	1127.7	1106.4	1302.1	1162.4
55°	1325.7	1329.6	1301.9	1232.1	1231.1	1278.4	1335.4	1315.2	1253.6	1418.4	1257.3
57.5°	1243.2	1260.0	1296.9	1313.5	1352.0	1400.4	1488.2	1500.1	1427.2	1507.4	1336.0
60°	1008.7	1045.5	1166.4	1325.2	1507.8	1628.3	1672.6	1682.7	1569.6	1581.5	1442.3
62.5°	716.0	753.6	906.8	1175.6	1510.1	1927.7	1947.3	1907.4	1726.4	1691.2	1625.6
65°	380.0	409.1	534.3	848.6	1309.3	1997.3	2427.7	2308.8	2003.2	1907.1	1862.5
67.5°	194.4	203.2	253.0	415.3	900.1	1774.0	2858.3	2942.1	2480.1	2121.2	1851.0
69°	172.0	177.2	210.2	300.2	576.4	1502.6	2879.3	3159.5	2729.9	2103.4	1682.1
70°	166.5	171.1	201.1	271.8	450.5	1260.1	2799.0	3140.4	2793.7	2035.4	1556.0
72.5°	141.4	145.3	179.1	240.1	366.2	625.5	2273.7	2661.1	2506.9	1695.6	1126.3
75°	94.5	107.4	171.9	225.1	340.6	355.4	1499.0	1923.0	1786.4	1143.6	586.7
77.5°	22.7	24.4	48.5	179.1	311.5	312.7	770.9	1195.4	975.1	407.6	138.7
80°	12.2	11.8	13.6	35.5	290.0	293.5	347.1	580.3	348.2	67.6	45.7
82.5°	8.6	8.2	8.8	14.9	91.3	267.3	251.1	262.7	144.3	26.0	20.5
85°	3.1	3.0	4.8	13.5	28.6	153.7	258.0	216.6	116.9	11.9	15.0
87.5°	1.1	0.9	1.9	7.3	8.8	65.5	159.2	163.7	46.0	7.2	7.1
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: P299995

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL3-7027-600-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	714.1	704.4	686.6	668.2	651.3	631.0	620.8	610.8	606.6	605.0	597.7
5°	693.5	677.0	639.1	601.1	566.0	528.8	504.2	484.5	472.9	467.3	458.3
7.5°	667.0	640.1	582.6	523.9	469.3	415.5	375.5	344.8	323.7	313.6	304.3
10°	641.3	605.5	523.8	443.8	369.6	298.2	243.1	203.2	177.7	165.9	158.4
12.5°	618.3	571.8	467.0	365.7	272.5	189.0	132.9	101.1	85.3	79.8	77.2
15°	597.8	540.9	413.3	291.5	184.5	108.0	72.7	61.8	59.3	59.3	59.0
17.5°	578.4	510.5	361.4	221.8	115.8	66.1	55.3	53.8	53.8	54.5	54.5
20°	559.8	481.5	311.3	159.2	72.9	52.4	50.0	49.6	50.0	50.7	50.7
22.5°	543.8	455.2	264.5	109.2	54.2	47.3	46.0	45.5	45.7	46.2	46.5
25°	531.9	433.0	220.4	74.0	46.6	43.0	41.7	40.9	40.2	40.2	40.5
27.5°	524.4	414.2	177.7	53.8	41.9	39.1	36.9	35.7	34.3	33.5	33.8
30°	518.9	396.4	137.6	44.0	37.6	34.7	31.9	29.9	27.9	26.9	27.3
32.5°	516.9	381.9	102.8	38.8	33.6	30.5	27.1	24.4	22.2	21.4	21.6
35°	522.4	370.5	75.3	35.1	30.5	26.6	22.7	19.7	18.0	17.5	17.7
37.5°	536.8	364.4	56.4	31.9	27.7	23.3	19.0	16.1	15.0	15.0	15.2
40°	564.0	364.3	45.3	29.8	25.2	20.2	15.6	13.6	13.0	13.3	13.5
42.5°	603.7	372.6	39.4	27.7	23.0	17.2	13.0	11.6	11.4	11.8	11.9
45°	658.1	387.7	36.3	26.0	20.7	14.4	10.9	10.0	10.0	10.5	10.7
47.5°	724.6	410.0	33.6	24.3	18.3	12.0	9.4	8.8	8.9	9.4	9.5
50°	804.7	438.0	31.0	22.4	16.6	10.0	8.2	7.7	7.8	8.4	8.6
52.5°	896.0	475.7	28.8	20.7	14.4	8.3	6.9	6.6	6.9	7.5	7.7
55°	974.3	509.5	26.2	19.2	11.6	6.9	5.6	5.6	6.0	6.7	6.9
57.5°	1049.6	544.9	23.8	16.6	9.1	5.5	4.7	4.8	5.3	6.1	6.3
60°	1160.1	604.8	21.0	13.9	6.9	4.4	3.9	4.1	4.7	5.5	5.6
62.5°	1347.8	696.1	18.2	11.6	5.3	3.5	3.1	3.5	4.2	5.2	5.3
65°	1517.2	733.2	14.9	9.7	4.1	2.7	2.7	3.1	4.1	5.0	5.2
67.5°	1422.7	617.2	11.6	7.7	3.1	2.0	2.2	3.0	3.9	5.0	5.2
69°	1258.2	504.7	9.9	6.1	2.7	1.9	2.0	3.0	3.9	4.8	5.0
70°	1130.0	426.1	8.8	5.2	2.4	1.9	2.0	2.8	3.9	4.8	5.0
72.5°	756.9	230.1	7.1	3.7	2.2	1.7	1.7	2.8	3.7	4.7	4.8
75°	325.3	63.6	5.6	2.7	1.9	1.6	1.6	2.7	3.6	4.5	4.8
77.5°	59.5	16.1	4.5	2.4	1.9	1.6	1.4	2.5	3.5	4.4	4.5
80°	23.6	8.0	3.6	2.0	1.7	1.4	1.2	2.4	3.3	4.2	4.4
82.5°	14.3	4.5	3.0	1.9	1.7	1.2	1.1	2.0	3.1	4.1	4.2
85°	11.6	3.1	2.4	1.9	1.6	1.2	0.9	1.9	2.8	3.9	4.1
87.5°	5.6	2.2	2.2	1.7	1.6	1.2	0.9	1.7	2.7	3.7	3.9
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)