

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: P299635

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-7027-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299635  
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-SL2-7027-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K 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: 3291.4 lumens  
Efficiency: N/A  
Efficacy: 74.8 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

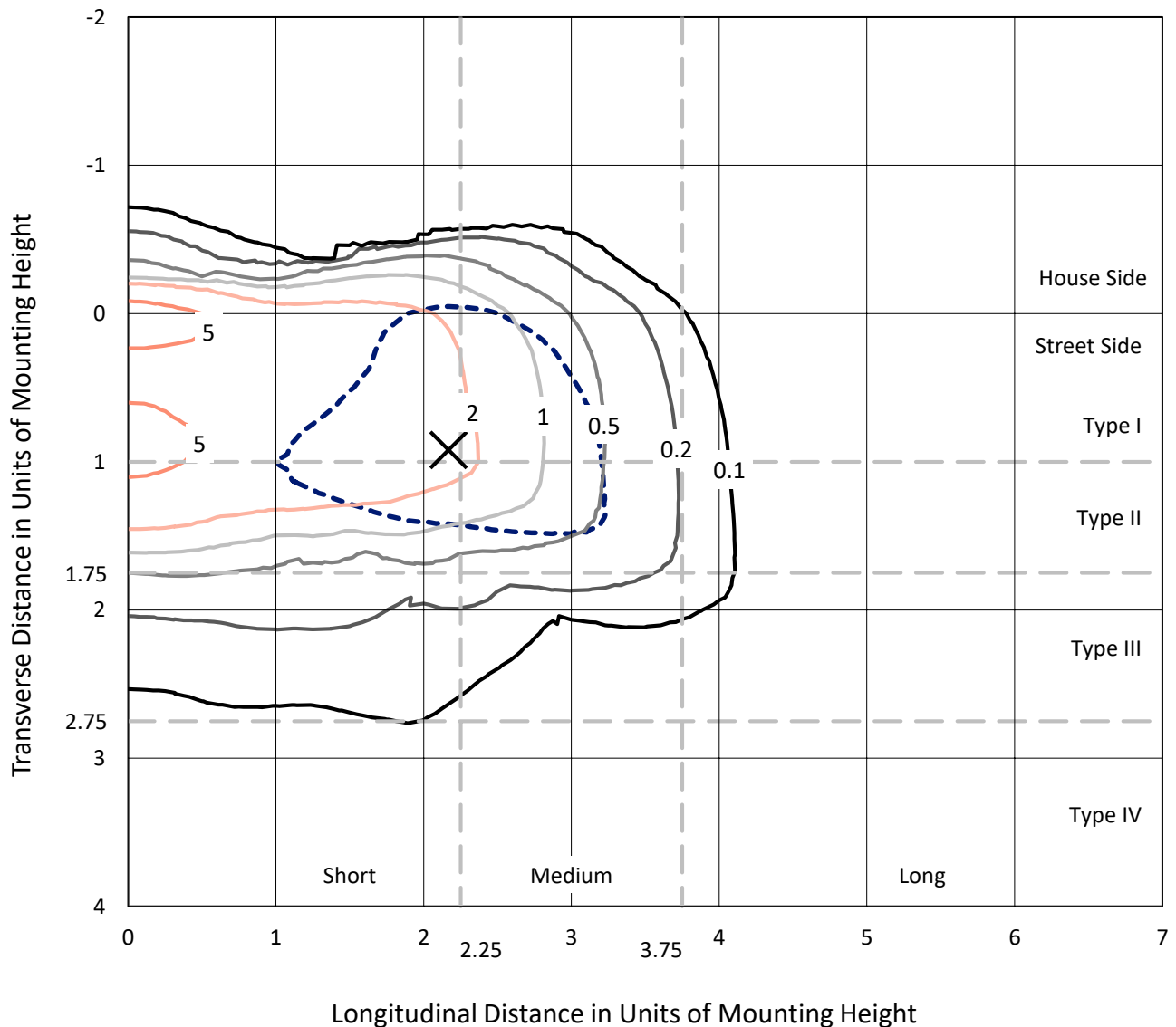


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

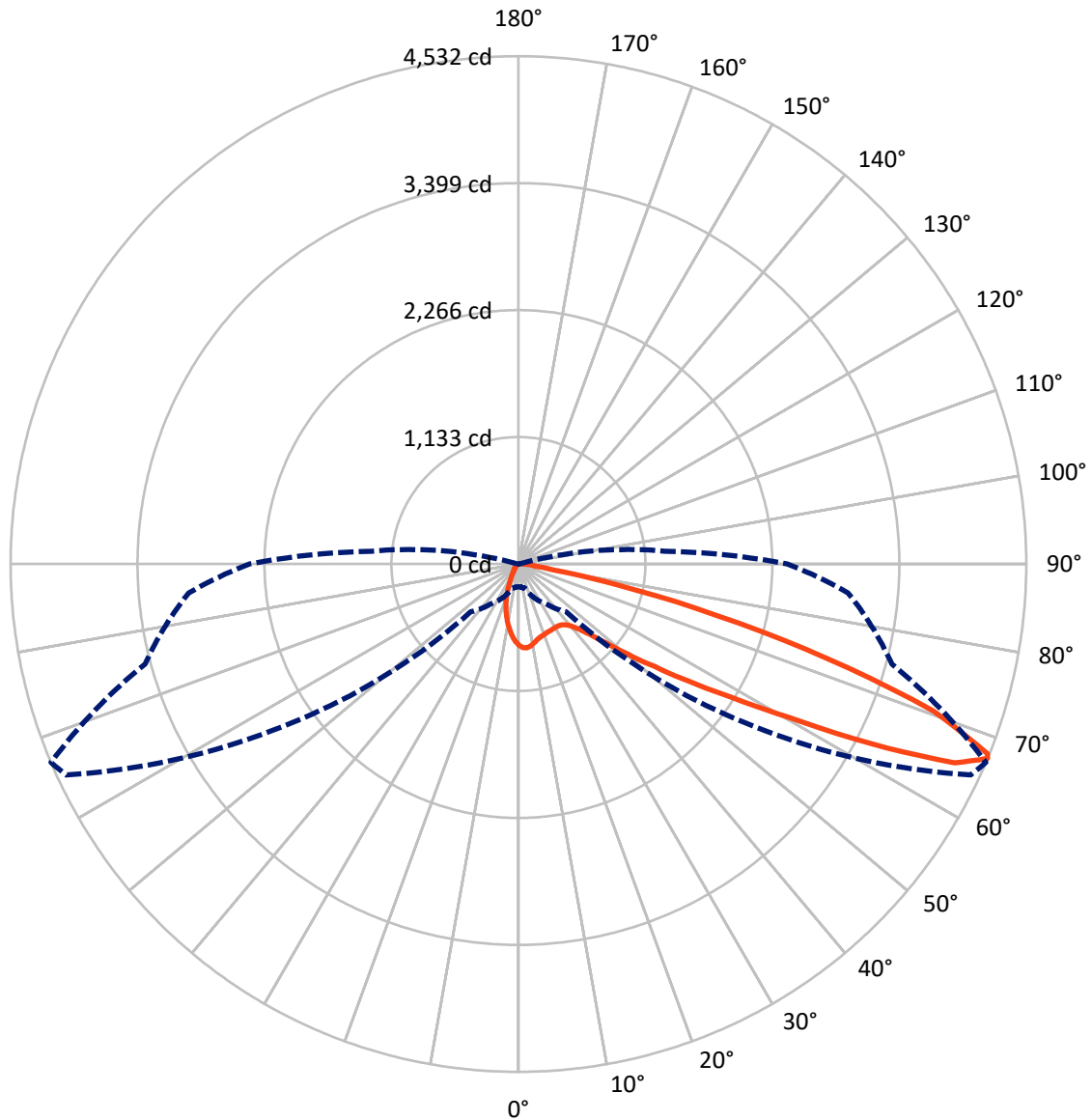


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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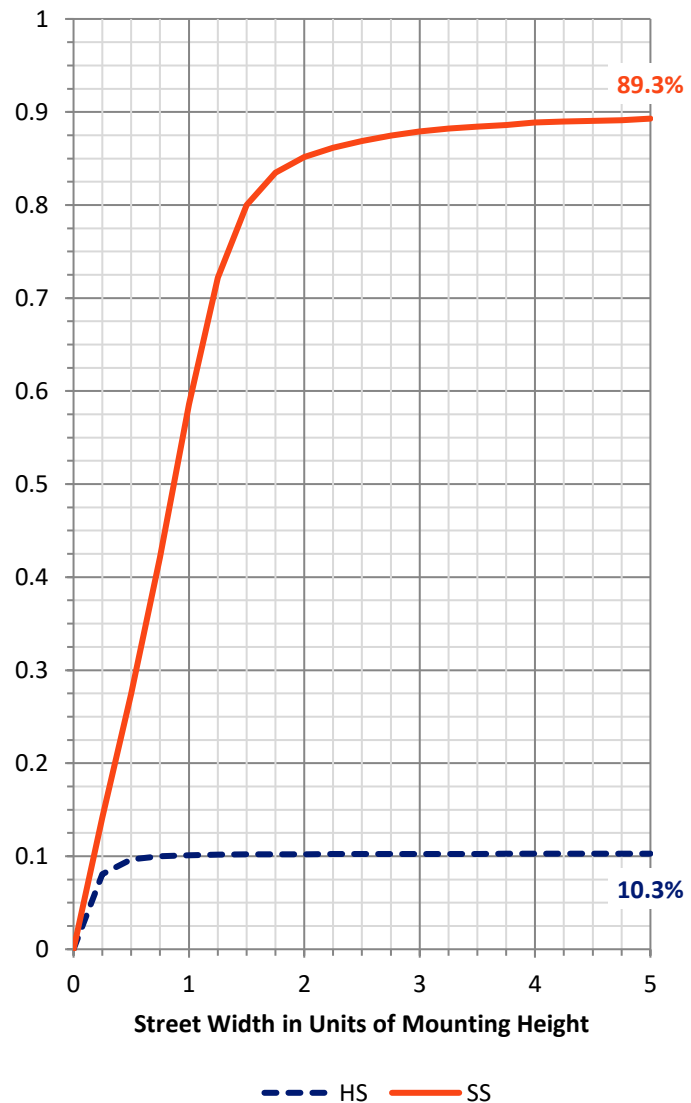
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	341.7	0.0	341.7
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	2949.6	0.0	2949.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	3291.4	0.0	3291.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.1	1.8
10°-20°	125.7	3.8
20°-30°	182.8	5.6
30°-40°	285.1	8.7
40°-50°	505.1	15.3
50°-60°	799.3	24.3
60°-70°	915.4	27.8
70°-80°	379.7	11.5
80°-90°	39.2	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°	3291.4	100.0
0°-180°	3291.4	100.0



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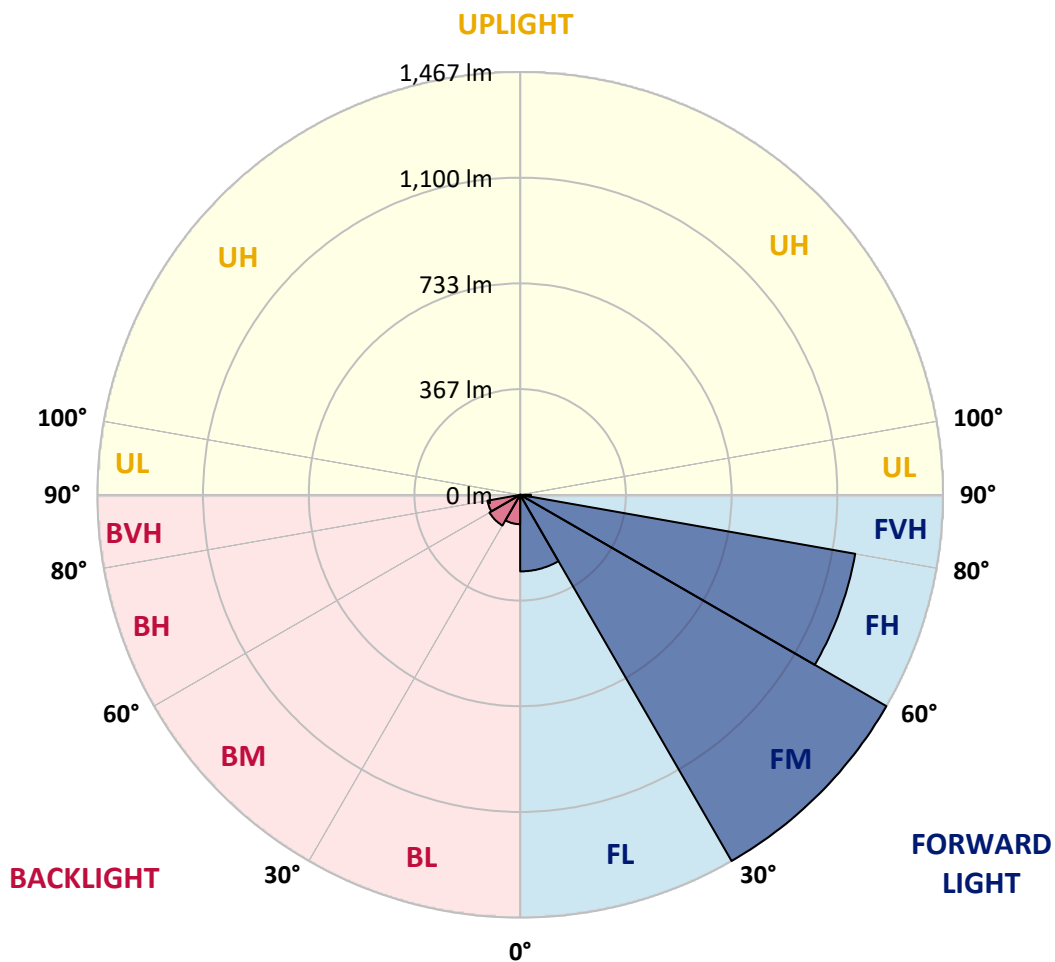
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	265.6	8.1			
FM (30°-60°)	1466.6	44.6			
FH (60°-80°)	1180.0	35.9			G1/1800
FVH (80°-90°)	37.5	1.1			G1/100
BL (0°-30°)	102.0	3.1	B0/110		
BM (30°-60°)	122.8	3.7	B0/220		
BH (60°-80°)	115.2	3.5	B1/500		G1/500
BVH (80°-90°)	1.8	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°	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9
2.5°	750.4	752.0	751.8	752.9	755.6	755.8	753.1	747.9	746.8	740.1	728.4
5°	692.1	696.5	699.2	710.1	722.4	737.2	748.3	752.4	751.8	747.0	729.3
7.5°	625.5	629.9	633.0	645.8	662.1	687.5	716.5	740.3	742.4	747.6	728.6
10°	581.1	581.9	586.1	598.4	615.5	641.4	676.0	717.6	724.0	743.0	726.6
12.5°	544.6	545.2	550.8	564.0	582.3	608.4	644.7	692.9	702.6	737.2	726.3
15°	518.7	520.8	525.8	539.7	559.0	585.0	622.2	674.6	686.3	735.1	729.7
17.5°	510.1	512.4	513.9	523.9	541.6	566.9	605.1	662.7	676.0	736.2	736.4
20°	519.1	520.8	517.4	519.9	530.8	553.5	590.7	652.5	668.3	737.6	745.1
22.5°	552.7	553.5	544.1	533.1	531.2	543.7	579.4	644.5	661.4	741.2	755.2
25°	610.3	609.0	593.6	570.0	547.7	542.0	572.7	639.5	657.9	745.1	765.8
27.5°	679.8	681.7	660.6	626.2	583.8	553.5	571.7	637.4	656.4	747.8	775.0
30°	764.3	767.0	742.8	699.6	638.7	581.9	580.5	637.0	655.4	746.0	775.8
32.5°	850.5	853.7	834.7	790.2	712.0	629.5	600.5	641.2	657.3	740.1	771.4
35°	940.7	945.3	932.6	894.4	811.5	698.2	635.6	654.1	666.4	739.5	767.0
37.5°	1065.3	1069.5	1045.7	1005.2	931.9	790.4	692.1	678.3	687.7	748.7	768.1
40°	1251.3	1250.7	1189.3	1127.3	1064.1	907.5	771.4	722.0	726.8	776.6	782.3
42.5°	1454.0	1453.1	1362.3	1268.0	1211.0	1051.7	875.6	797.7	794.4	827.8	819.2
45°	1610.3	1610.1	1536.0	1429.9	1387.8	1217.1	1010.4	902.9	897.9	911.1	887.1
47.5°	1676.9	1678.1	1640.8	1566.2	1583.8	1441.0	1180.3	1055.3	1047.8	1042.4	1006.0
50°	1625.1	1627.4	1630.5	1615.9	1727.6	1741.8	1408.2	1270.1	1266.5	1242.5	1185.5
52.5°	1455.8	1467.5	1503.6	1549.8	1777.5	2030.6	1765.4	1537.0	1517.4	1491.9	1429.1
55°	1170.5	1183.4	1251.9	1364.2	1703.2	2220.2	2266.1	1881.0	1848.4	1772.2	1681.5
57.5°	774.6	794.6	894.0	1036.9	1487.5	2250.8	2765.6	2358.5	2244.8	2036.1	1934.0
60°	426.8	446.0	553.9	683.3	1074.3	2099.9	3101.6	2980.1	2779.3	2331.2	2240.6
62.5°	262.8	273.2	352.9	473.2	644.3	1657.4	3171.1	3761.2	3528.8	2711.1	2610.9
65°	209.3	213.7	252.6	386.8	461.9	985.8	2946.7	4356.8	4279.2	3171.1	2942.5
67°	203.1	204.8	223.3	332.1	435.4	604.3	2468.7	4453.7	4532.4	3449.5	2952.8
67.5°	204.5	206.4	223.8	317.0	434.6	555.4	2303.9	4415.5	4515.0	3471.6	2906.9
70°	197.2	203.1	256.3	316.8	413.3	461.5	1379.8	3825.8	3929.2	3225.6	2466.5
72.5°	69.9	70.3	110.8	256.3	449.4	466.5	692.9	2804.6	2881.2	2467.5	1778.3
75°	41.5	35.3	36.9	73.0	429.5	453.1	399.7	1792.1	1820.7	1413.9	900.6
77.5°	28.6	25.0	25.7	32.3	163.6	446.7	317.5	934.6	904.0	495.9	191.8
80°	16.3	14.4	15.4	28.2	59.5	416.8	299.5	379.0	323.1	84.1	53.0
82.5°	8.6	7.3	8.8	23.2	41.5	259.7	300.1	183.1	145.1	28.4	36.1
85°	3.1	2.5	4.2	15.9	27.6	79.7	278.2	154.0	120.9	13.8	27.5
87.5°	0.6	0.6	1.7	6.5	11.1	24.4	164.5	91.4	61.2	8.3	18.8
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°	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9	725.9
2.5°	723.6	715.3	704.2	690.5	674.4	660.2	649.7	638.7	636.4	632.6	632.0
5°	718.8	704.6	676.9	645.2	611.5	580.9	556.2	534.1	524.3	515.8	514.9
7.5°	711.7	690.4	643.3	592.3	539.5	491.5	450.8	422.0	395.5	382.8	380.9
10°	703.4	672.9	605.5	534.7	461.7	393.9	333.5	282.8	252.1	233.8	231.5
12.5°	695.7	655.8	566.9	475.0	378.0	287.4	209.6	161.3	129.0	116.0	114.4
15°	692.1	642.0	530.8	413.9	290.5	183.0	114.6	88.7	78.1	75.1	74.9
17.5°	691.7	630.3	495.5	350.7	203.5	106.4	74.7	68.2	66.0	65.3	65.3
20°	691.5	619.1	460.2	285.3	129.2	70.8	62.2	60.7	59.1	58.2	58.2
22.5°	693.6	609.1	423.3	218.5	81.4	57.4	54.7	53.2	51.3	49.9	49.7
25°	695.7	601.5	385.7	155.5	58.9	49.9	47.2	45.1	42.4	40.7	40.5
27.5°	696.1	591.9	345.4	104.1	49.3	43.6	40.1	36.9	33.8	32.1	31.9
30°	690.4	575.7	300.6	70.3	43.6	37.8	33.2	29.8	26.9	25.5	25.5
32.5°	679.0	555.8	251.5	53.0	38.8	32.4	27.5	24.2	22.3	21.7	21.5
35°	668.9	534.3	201.0	44.9	34.7	27.5	22.5	20.3	19.2	19.0	18.8
37.5°	662.9	517.0	153.6	40.7	30.9	23.0	19.0	17.5	16.9	16.5	16.7
40°	667.5	502.6	113.5	37.2	27.1	19.2	16.1	15.4	14.8	14.6	14.6
42.5°	687.7	500.1	84.3	34.2	23.4	15.9	14.0	13.4	13.1	12.9	13.1
45°	740.7	515.5	65.5	31.3	19.8	13.4	11.9	11.7	11.5	11.5	11.5
47.5°	820.3	547.1	54.5	28.0	16.5	11.5	10.4	10.2	10.0	10.2	10.2
50°	955.3	605.1	48.8	24.8	13.6	9.8	8.8	8.8	8.8	8.8	9.0
52.5°	1160.5	719.2	44.9	21.5	11.1	8.3	7.5	7.5	7.7	7.7	7.9
55°	1389.2	870.4	41.5	18.2	9.4	6.9	6.1	6.3	6.5	6.7	6.7
57.5°	1637.2	1038.0	38.6	15.0	8.1	5.6	5.2	5.4	5.6	6.0	6.0
60°	1936.5	1219.4	34.4	11.7	6.7	4.4	4.0	4.4	5.0	5.4	5.6
62.5°	2265.2	1394.9	29.0	9.2	5.6	3.5	3.3	4.0	4.8	5.2	5.4
65°	2489.8	1450.0	22.3	7.5	4.2	2.5	2.7	3.6	4.6	5.2	5.2
67°	2398.8	1314.7	18.2	6.3	3.5	1.9	2.5	3.6	4.6	5.0	5.2
67.5°	2335.6	1261.7	17.5	6.1	3.3	1.9	2.5	3.6	4.6	5.2	5.2
70°	1900.4	947.8	14.6	4.6	2.7	1.7	2.1	3.5	4.4	5.0	5.0
72.5°	1320.4	584.4	13.1	3.3	2.3	1.5	1.9	3.3	4.2	4.8	5.0
75°	627.8	211.6	11.1	2.5	2.1	1.3	1.7	3.3	4.2	4.8	4.8
77.5°	128.0	49.1	9.0	2.1	1.7	1.3	1.5	3.1	4.0	4.6	4.6
80°	42.0	19.0	6.7	1.9	1.7	1.3	1.5	2.9	4.0	4.4	4.6
82.5°	30.3	9.6	4.4	1.9	1.7	1.3	1.3	2.9	3.8	4.4	4.4
85°	23.2	6.7	2.9	1.9	1.7	1.3	1.3	2.7	3.6	4.2	4.2
87.5°	15.4	2.7	2.3	1.9	1.7	1.3	1.3	2.7	3.5	4.0	4.2
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)