

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: P299221

Luminaire Tested: **GLNA-AF-02-LED-E1-T3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-T3-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6947.9 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 66
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

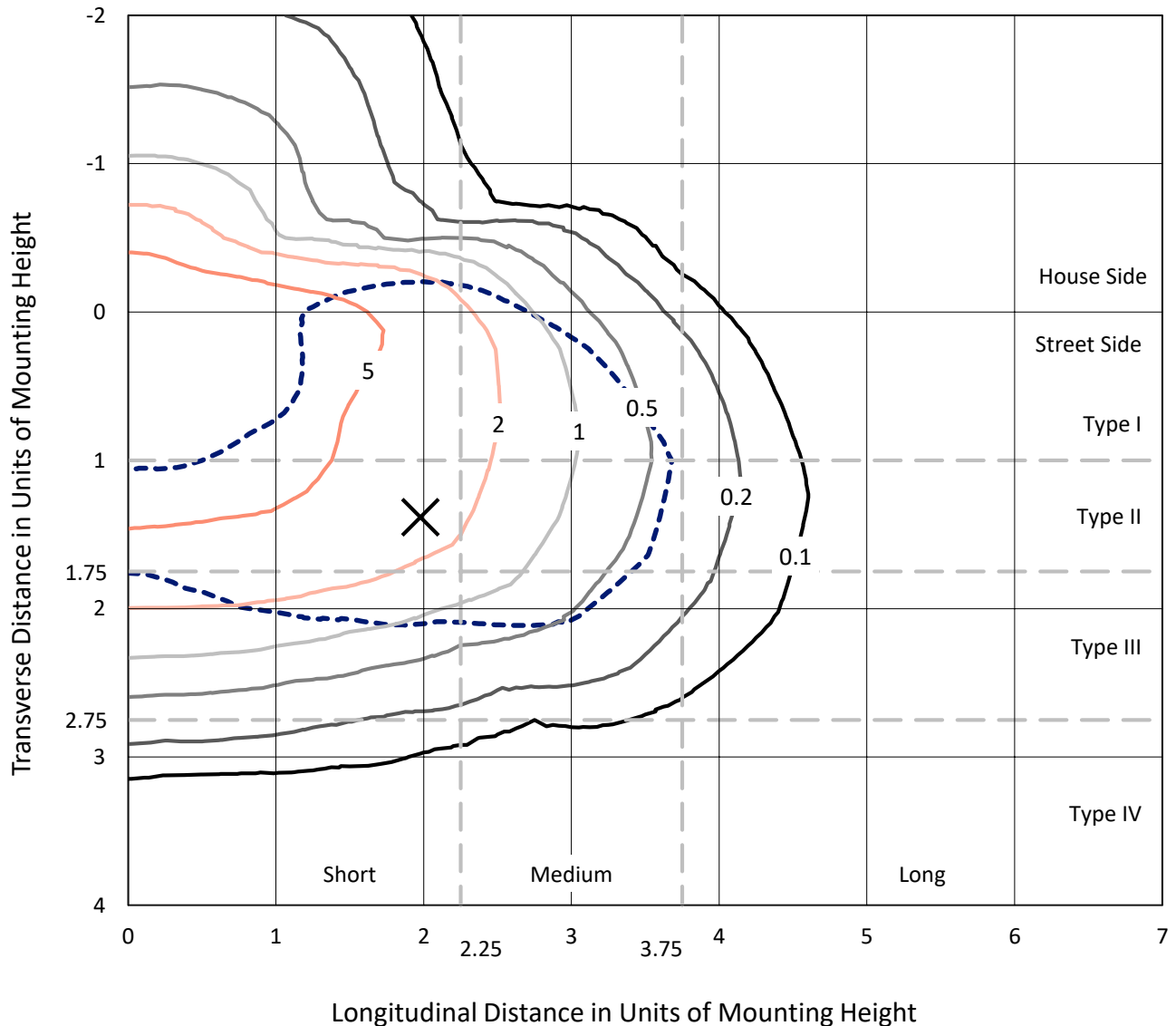


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

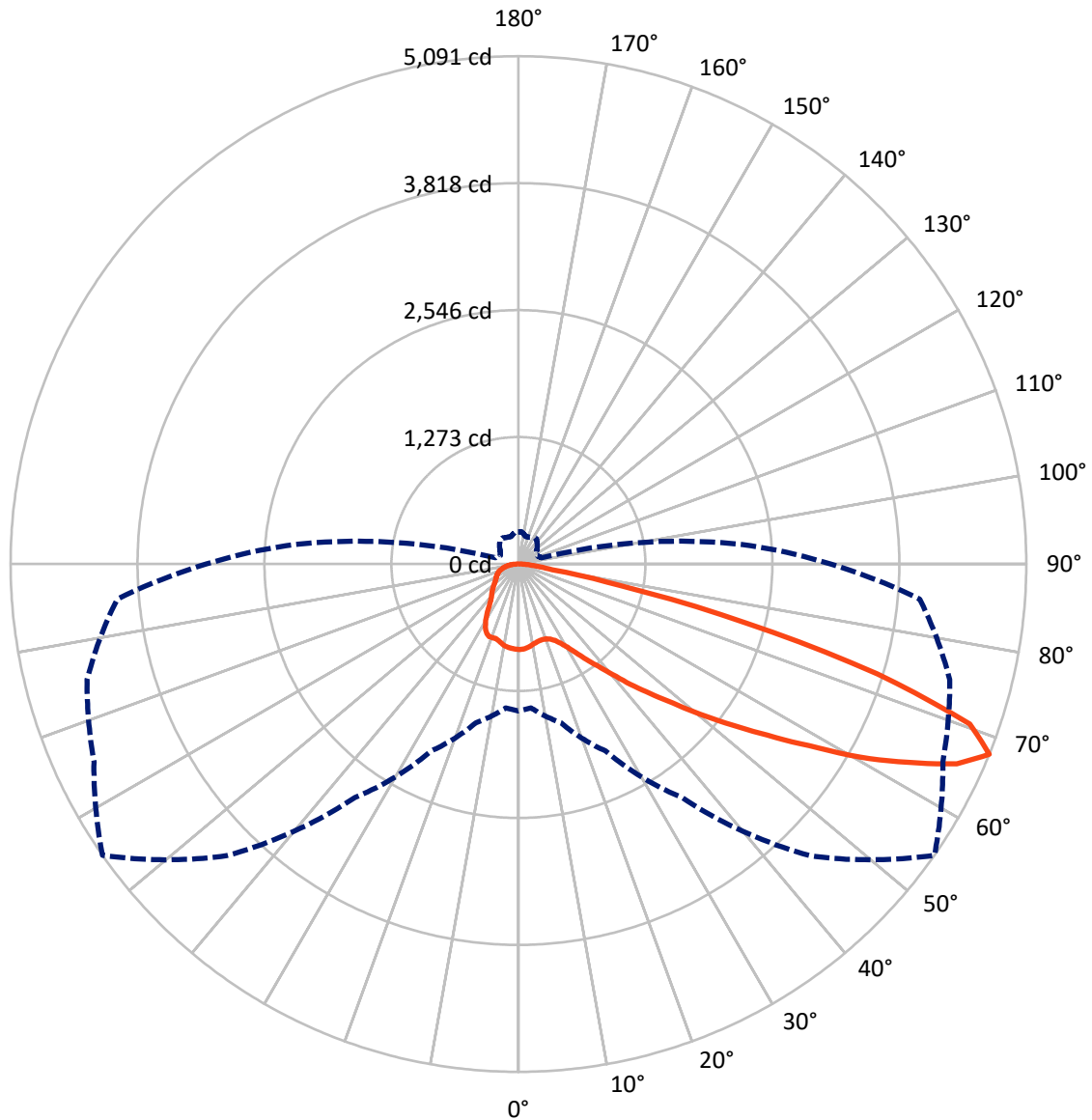


Based on 10 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1500.9	0.0	1500.9
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	5447.0	0.0	5447.0
	% Fixture	78.4	0.0	78.4
Total	Lumens	6947.9	0.0	6947.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	1.2
10°-20°	226.5	3.3
20°-30°	379.4	5.5
30°-40°	623.9	9.0
40°-50°	1050.2	15.1
50°-60°	1652.9	23.8
60°-70°	1972.6	28.4
70°-80°	847.1	12.2
80°-90°	115.5	1.7
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°	6947.9	100.0
0°-180°	6947.9	100.0



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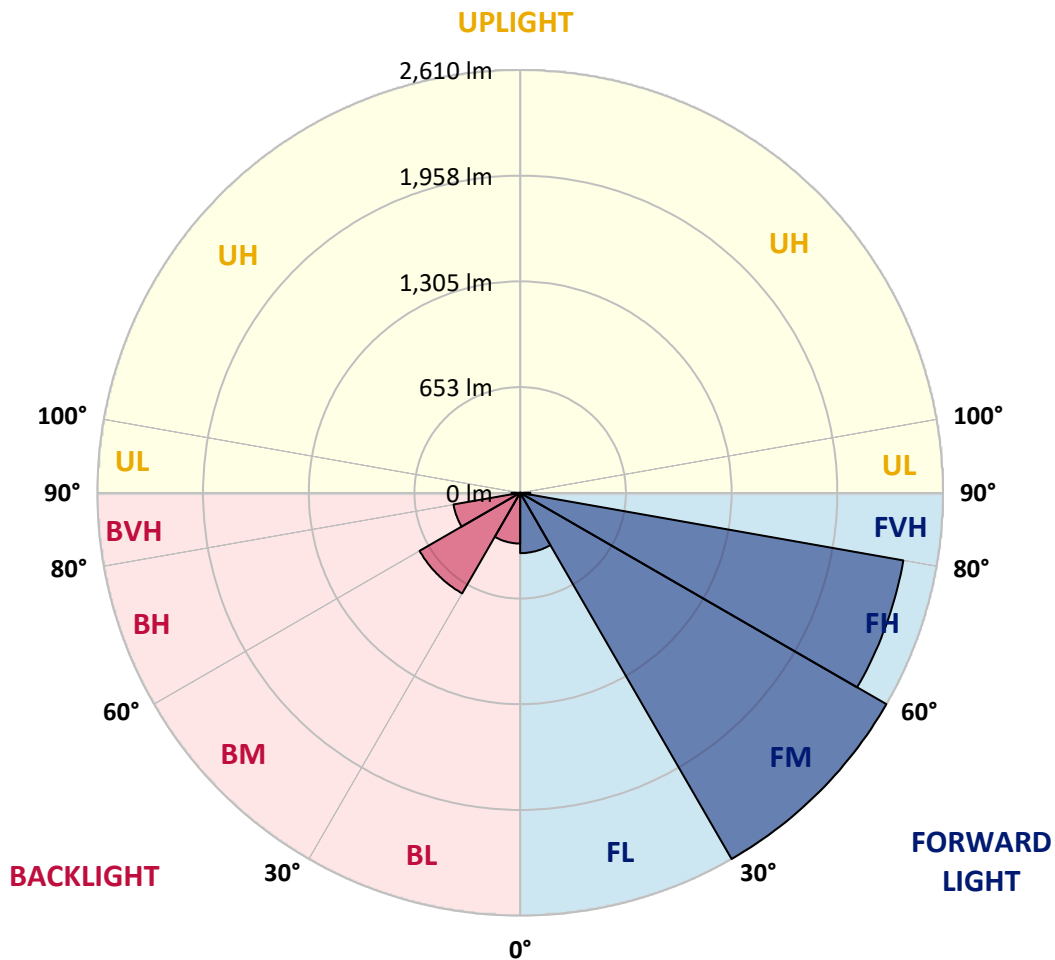
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	372.4	5.4			
FM (30°-60°)	2610.1	37.6			
FH (60°-80°)	2401.9	34.6			G2/5000
FVH (80°-90°)	62.5	0.9			G1/100
BL (0°-30°)	313.4	4.5	B1/500		
BM (30°-60°)	716.8	10.3	B1/1000		
BH (60°-80°)	417.7	6.0	B1/500		G1/500
BVH (80°-90°)	53.0	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7
2.5°	849.4	849.7	850.4	853.1	855.4	854.7	855.1	853.7	853.4	851.4	853.4
5°	838.6	839.6	840.0	844.3	847.0	847.7	846.7	845.0	843.0	841.0	842.0
7.5°	814.1	816.8	817.1	823.2	827.6	833.3	833.6	833.9	832.9	831.6	833.6
10°	798.7	799.4	799.0	803.4	806.7	813.1	816.8	823.2	825.9	826.5	827.9
12.5°	797.7	797.0	796.0	796.0	795.0	797.7	804.4	813.5	819.8	821.8	823.5
15°	808.4	808.1	804.7	799.7	793.3	791.3	797.0	807.1	815.5	819.8	821.5
17.5°	832.6	830.6	825.2	813.8	800.0	794.7	795.3	803.7	813.5	819.2	820.8
20°	876.9	876.9	865.5	844.0	819.5	806.7	800.7	805.7	815.1	822.9	825.2
22.5°	953.4	954.1	934.9	899.7	858.4	831.2	816.1	815.1	826.2	834.9	837.6
25°	1061.8	1059.1	1032.3	981.9	919.2	874.2	848.0	842.0	851.4	861.1	864.5
27.5°	1188.0	1178.2	1146.4	1085.6	1004.4	938.6	898.4	888.6	897.7	908.8	912.1
30°	1312.8	1302.7	1264.8	1198.4	1108.1	1024.9	967.2	951.4	964.1	979.9	981.9
32.5°	1437.6	1437.6	1395.4	1317.8	1219.5	1127.9	1058.8	1040.0	1061.1	1080.2	1084.6
35°	1587.0	1587.7	1546.7	1453.4	1347.7	1250.7	1174.5	1160.8	1192.7	1206.1	1216.5
37.5°	1770.5	1774.2	1721.5	1608.8	1493.0	1391.0	1300.4	1281.6	1313.5	1350.1	1383.6
40°	1968.9	1973.6	1915.5	1776.6	1660.8	1554.1	1456.1	1422.2	1475.2	1545.0	1588.3
42.5°	2158.1	2182.3	2126.3	1983.3	1858.8	1748.4	1649.1	1599.7	1666.2	1771.6	1809.1
45°	2431.6	2449.1	2351.4	2221.9	2104.8	1981.3	1849.7	1797.7	1890.7	2023.6	2031.3
47.5°	2613.9	2600.8	2551.1	2470.6	2396.4	2281.0	2083.0	2025.9	2149.4	2305.8	2262.5
50°	2710.9	2714.9	2708.2	2712.9	2715.6	2643.1	2368.9	2290.7	2438.0	2627.0	2527.3
52.5°	2801.5	2774.6	2796.8	2906.8	3039.7	3012.9	2680.0	2598.4	2747.4	2983.3	2807.2
55°	2799.4	2758.5	2830.7	3025.0	3313.2	3344.1	3029.3	2935.4	3074.6	3365.6	3103.8
57.5°	2700.4	2702.5	2813.5	3067.9	3503.8	3655.5	3434.7	3293.8	3421.6	3752.8	3374.6
60°	2564.2	2582.7	2742.7	3060.9	3656.5	3910.9	3932.0	3680.0	3761.6	4104.9	3598.8
62.5°	2344.4	2363.9	2584.7	2987.7	3633.4	4156.9	4381.7	4118.3	4117.0	4318.3	3664.6
65°	1997.7	1992.0	2223.9	2714.2	3439.1	4338.8	4828.4	4497.2	4384.7	4321.7	3532.4
67.5°	1473.2	1447.7	1646.7	2067.2	2858.5	4135.1	5091.2	4694.5	4476.0	4037.4	3128.3
70°	764.5	739.0	900.0	1207.1	1879.9	3227.3	4800.2	4592.5	4274.3	3384.4	2450.8
72.5°	326.9	322.5	387.9	529.6	909.4	1861.5	3763.9	3975.0	3667.6	2521.6	1685.0
75°	219.8	218.5	243.0	288.6	409.1	755.4	2355.5	2821.6	2683.3	1563.5	947.7
77.5°	172.5	170.8	185.2	207.4	265.1	298.0	1045.3	1514.8	1402.1	680.6	414.8
80°	134.9	133.6	142.6	154.7	190.6	187.9	344.0	602.7	466.5	260.7	201.7
82.5°	106.4	106.4	113.8	114.1	135.2	128.2	179.5	265.4	232.9	152.0	123.5
85°	97.3	97.3	105.0	85.2	88.3	80.9	111.4	157.4	147.7	62.4	53.7
87.5°	49.0	47.7	88.3	75.5	48.0	43.0	54.4	76.2	81.9	34.6	26.8
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7	856.7
2.5°	852.7	852.4	853.1	853.4	856.1	859.8	861.4	863.8	865.1	864.5
5°	842.7	843.3	846.0	848.0	852.7	858.8	862.1	864.8	867.2	866.1
7.5°	834.3	835.9	840.0	841.6	844.3	846.0	845.7	846.7	848.7	846.3
10°	829.6	831.6	834.6	832.2	825.9	816.8	808.4	804.1	805.4	803.7
12.5°	824.9	827.6	825.2	814.1	796.3	784.6	778.2	778.9	781.9	782.6
15°	822.2	823.2	813.1	792.3	774.2	772.5	775.9	775.2	775.5	775.5
17.5°	822.2	819.5	800.7	779.9	772.2	769.2	758.8	745.7	740.0	738.0
20°	826.5	819.5	796.7	782.9	766.1	740.3	712.8	688.6	677.9	674.9
22.5°	839.6	827.6	808.1	784.3	736.6	693.3	649.7	620.8	601.4	598.0
25°	866.1	852.7	830.6	766.5	689.6	627.9	578.2	546.0	526.5	523.8
27.5°	912.5	903.7	842.7	727.2	627.2	561.1	515.1	490.3	475.9	474.9
30°	982.3	977.9	836.6	669.2	550.4	496.3	474.2	459.8	449.0	448.7
32.5°	1093.7	1058.4	816.8	598.3	480.2	450.4	441.3	432.6	424.2	424.2
35°	1237.0	1123.5	779.2	522.5	437.6	424.9	413.4	399.7	388.6	387.9
37.5°	1405.4	1163.8	711.8	461.4	417.5	407.7	391.0	370.5	351.0	347.7
40°	1575.6	1175.9	616.8	423.8	404.7	390.6	370.1	346.0	327.2	326.2
42.5°	1731.6	1152.7	516.1	398.0	392.0	373.2	351.7	330.2	315.4	315.1
45°	1862.5	1092.7	431.6	373.5	378.5	357.4	338.3	320.8	309.4	307.1
47.5°	1985.7	1007.8	372.2	347.7	365.1	348.7	332.6	316.1	305.0	303.4
50°	2128.6	916.1	330.6	322.5	353.4	345.7	337.3	320.1	301.7	299.7
52.5°	2301.8	836.9	298.0	300.3	344.3	349.7	349.3	331.6	299.3	296.7
55°	2495.1	749.0	273.5	282.2	340.6	357.1	352.4	342.3	301.4	297.3
57.5°	2685.3	646.3	256.4	268.5	335.2	356.4	337.9	323.5	306.1	300.3
60°	2828.0	508.4	243.3	256.4	323.5	345.3	322.2	303.0	305.0	300.7
62.5°	2837.4	393.0	227.5	246.0	305.7	334.2	311.8	294.0	309.4	305.4
65°	2670.6	297.0	212.4	233.6	286.6	327.2	301.7	288.9	318.5	314.1
67.5°	2248.4	238.9	199.7	220.8	267.5	312.4	292.6	284.2	326.5	318.8
70°	1623.2	203.7	187.3	205.4	250.3	295.7	284.6	275.9	304.7	292.6
72.5°	999.4	176.5	173.2	184.9	237.3	278.2	272.5	260.1	274.5	264.8
75°	499.0	153.0	157.4	164.8	218.8	258.4	252.4	239.9	242.0	239.9
77.5°	238.9	130.9	138.9	144.6	195.0	235.9	229.5	216.8	214.4	214.8
80°	151.3	109.4	117.1	121.1	174.2	209.7	203.4	190.6	217.5	201.7
82.5°	94.6	88.9	90.9	98.3	151.7	182.6	174.2	162.8	196.0	155.0
85°	52.4	62.1	64.8	71.1	116.8	152.7	144.3	129.9	116.4	114.4
87.5°	31.2	36.9	37.9	42.6	78.5	110.4	97.7	92.6	76.8	76.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)