

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: P299099

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299099  
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-01-LED-E1-T3-7050  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6212.2 lumens  
Efficiency: N/A  
Efficacy: 105.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

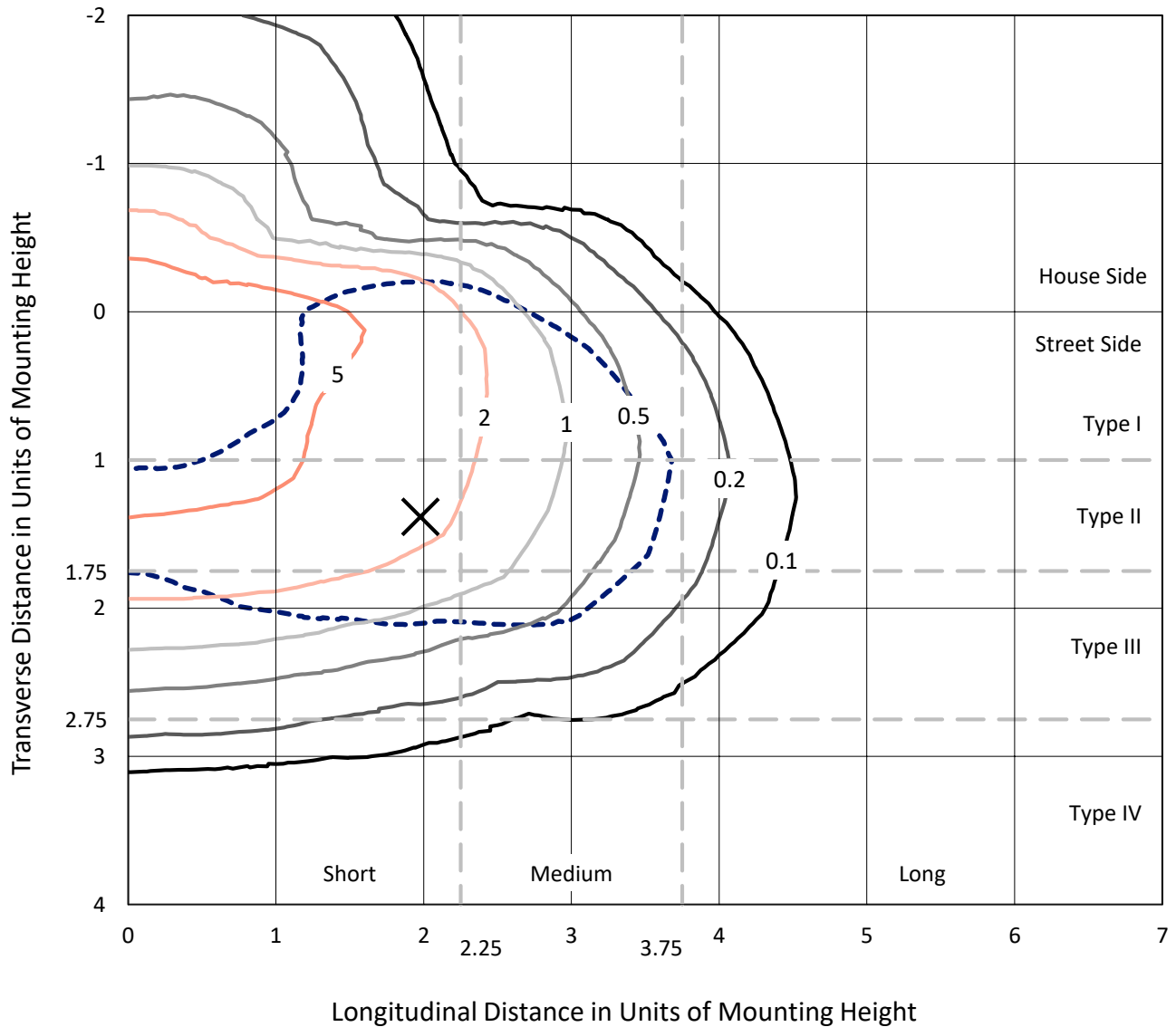
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

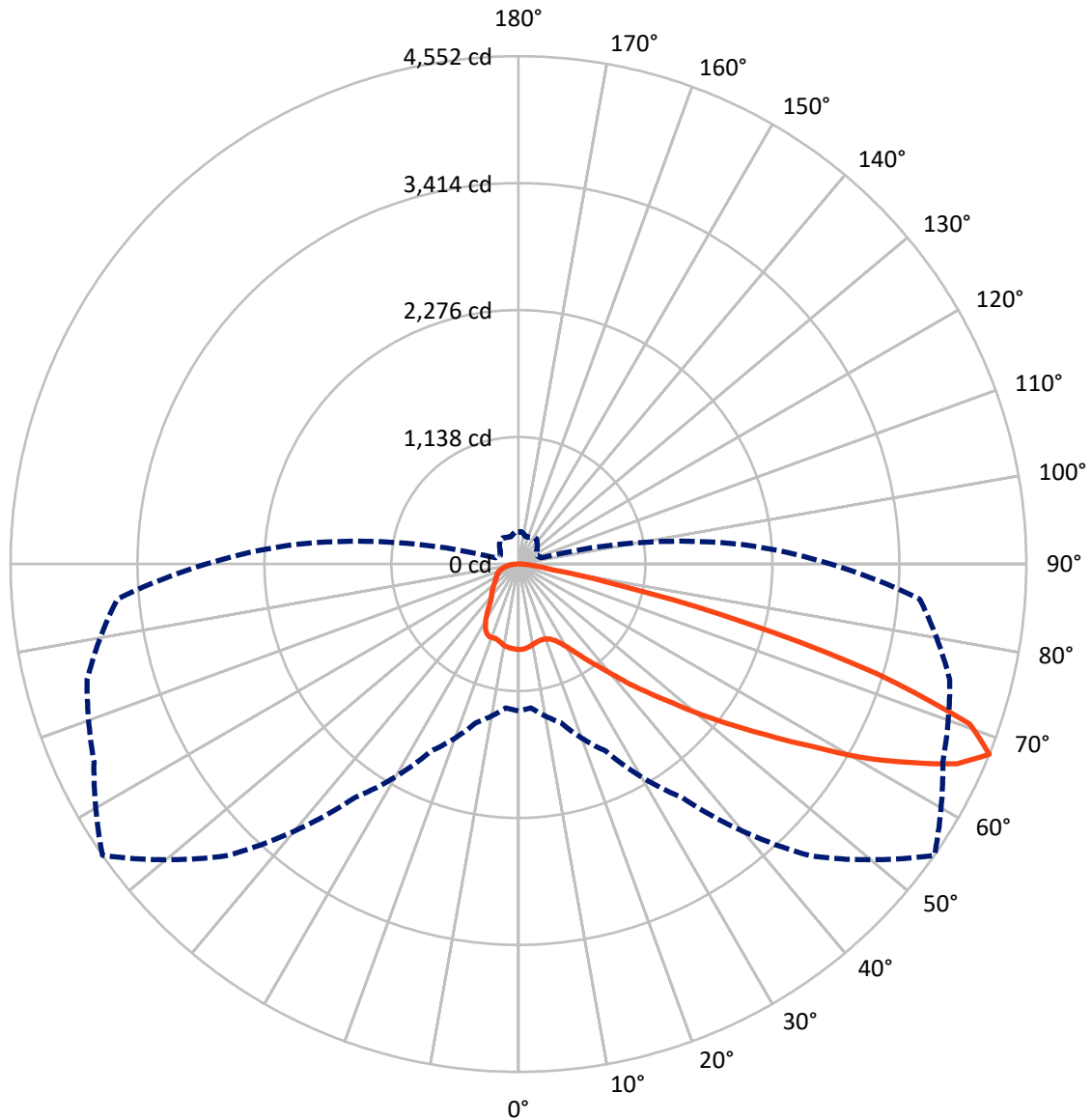
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.9 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
<b>House Side</b>	Lumens	1341.9	0.0	1341.9
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	4870.2	0.0	4870.2
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	6212.2	0.0	6212.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	1.2
10°-20°	202.5	3.3
20°-30°	339.2	5.5
30°-40°	557.8	9.0
40°-50°	939.0	15.1
50°-60°	1477.9	23.8
60°-70°	1763.7	28.4
70°-80°	757.3	12.2
80°-90°	103.2	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°	6212.2	100.0
0°-180°	6212.2	100.0



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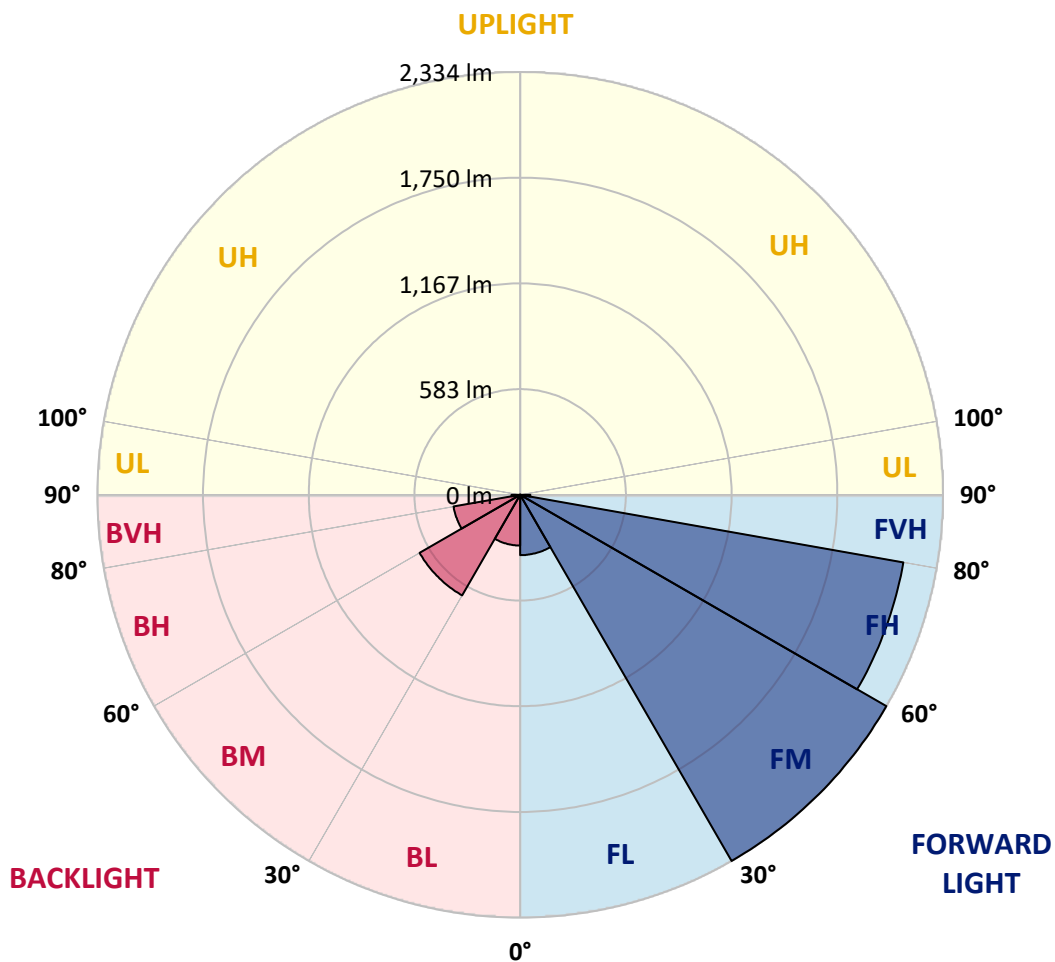
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	333.0	5.4			
FM	(30°-60°)	2333.8	37.6			
FH	(60°-80°)	2147.6	34.6			G2/5000
FVH	(80°-90°)	55.9	0.9			G1/100
BL	(0°-30°)	280.2	4.5	B1/500		
BM	(30°-60°)	640.9	10.3	B1/1000		
BH	(60°-80°)	373.4	6.0	B1/500		G1/500
BVH	(80°-90°)	47.4	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°	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0
2.5°	759.4	759.7	760.3	762.7	764.8	764.2	764.5	763.3	763.0	761.2	763.0
5°	749.8	750.7	751.0	754.9	757.3	757.9	757.0	755.5	753.7	751.9	752.8
7.5°	727.9	730.3	730.6	736.0	739.9	745.0	745.3	745.6	744.7	743.5	745.3
10°	714.1	714.7	714.4	718.3	721.3	727.0	730.3	736.0	738.4	739.0	740.2
12.5°	713.2	712.6	711.7	711.7	710.8	713.2	719.2	727.3	733.0	734.8	736.3
15°	722.8	722.5	719.5	715.0	709.3	707.5	712.6	721.6	729.1	733.0	734.5
17.5°	744.4	742.6	737.8	727.6	715.3	710.5	711.1	718.6	727.3	732.4	733.9
20°	784.0	784.0	773.8	754.6	732.7	721.3	715.9	720.4	728.8	735.7	737.8
22.5°	852.4	853.0	835.9	804.4	767.5	743.2	729.7	728.8	738.7	746.5	748.9
25°	949.4	947.0	923.0	878.0	821.8	781.6	758.2	752.8	761.2	769.9	772.9
27.5°	1062.2	1053.5	1025.0	970.7	898.1	839.2	803.2	794.5	802.6	812.5	815.5
30°	1173.8	1164.8	1130.9	1071.5	990.8	916.4	864.7	850.6	862.0	876.2	878.0
32.5°	1285.4	1285.4	1247.6	1178.3	1090.4	1008.5	946.7	929.9	948.8	965.9	969.8
35°	1418.9	1419.5	1382.9	1299.5	1205.0	1118.3	1050.2	1037.9	1066.4	1078.4	1087.7
37.5°	1583.1	1586.4	1539.3	1438.4	1334.9	1243.7	1162.7	1145.9	1174.4	1207.1	1237.1
40°	1760.4	1764.6	1712.7	1588.5	1485.0	1389.5	1301.9	1271.6	1319.0	1381.4	1420.1
42.5°	1929.6	1951.2	1901.1	1773.3	1662.0	1563.3	1474.5	1430.3	1489.8	1584.0	1617.6
45°	2174.2	2189.8	2102.5	1986.6	1881.9	1771.5	1653.9	1607.4	1690.5	1809.3	1816.2
47.5°	2337.1	2325.4	2281.0	2209.0	2142.7	2039.5	1862.4	1811.4	1921.8	2061.7	2022.9
50°	2423.8	2427.4	2421.4	2425.6	2428.0	2363.2	2118.1	2048.2	2179.9	2348.8	2259.7
52.5°	2504.8	2480.8	2500.6	2599.0	2717.9	2693.9	2396.2	2323.3	2456.5	2667.5	2509.9
55°	2503.0	2466.4	2530.9	2704.7	2962.4	2990.0	2708.6	2624.6	2749.1	3009.2	2775.2
57.5°	2414.5	2416.3	2515.6	2743.1	3132.8	3268.5	3071.0	2945.0	3059.3	3355.5	3017.3
60°	2292.7	2309.2	2452.3	2736.8	3269.4	3496.8	3515.7	3290.4	3363.3	3670.2	3217.8
62.5°	2096.2	2113.6	2311.0	2671.4	3248.7	3716.7	3917.8	3682.2	3681.0	3861.1	3276.6
65°	1786.2	1781.1	1988.4	2426.8	3074.9	3879.4	4317.1	4021.0	3920.5	3864.1	3158.3
67.5°	1317.2	1294.4	1472.4	1848.3	2555.8	3697.2	4552.1	4197.4	4002.1	3609.9	2797.1
70°	683.5	660.7	804.7	1079.3	1680.9	2885.6	4291.9	4106.2	3821.8	3026.0	2191.3
72.5°	292.3	288.3	346.9	473.5	813.1	1664.4	3365.4	3554.1	3279.3	2254.6	1506.6
75°	196.5	195.3	217.2	258.0	365.8	675.4	2106.1	2522.8	2399.2	1397.9	847.3
77.5°	154.2	152.7	165.6	185.4	237.0	266.4	934.7	1354.4	1253.6	608.5	370.9
80°	120.6	119.4	127.5	138.3	170.4	168.0	307.6	538.9	417.1	233.1	180.3
82.5°	95.1	95.1	101.7	102.0	120.9	114.6	160.5	237.3	208.2	135.9	110.4
85°	87.0	87.0	93.9	76.2	78.9	72.3	99.6	140.7	132.0	55.8	48.0
87.5°	43.8	42.6	78.9	67.5	42.9	38.4	48.6	68.1	73.2	30.9	24.0
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°	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0	766.0
2.5°	762.4	762.1	762.7	763.0	765.4	768.7	770.2	772.3	773.5	772.9
5°	753.4	754.0	756.4	758.2	762.4	767.8	770.8	773.2	775.3	774.4
7.5°	745.9	747.4	751.0	752.5	754.9	756.4	756.1	757.0	758.8	756.7
10°	741.7	743.5	746.2	744.1	738.4	730.3	722.8	718.9	720.1	718.6
12.5°	737.5	739.9	737.8	727.9	712.0	701.5	695.8	696.4	699.1	699.7
15°	735.1	736.0	727.0	708.4	692.2	690.7	693.7	693.1	693.4	693.4
17.5°	735.1	732.7	715.9	697.3	690.4	687.7	678.4	666.7	661.6	659.8
20°	739.0	732.7	712.3	700.0	685.0	661.9	637.3	615.7	606.1	603.4
22.5°	750.7	739.9	722.5	701.2	658.6	619.9	580.9	555.1	537.7	534.7
25°	774.4	762.4	742.6	685.3	616.6	561.4	517.0	488.2	470.8	468.4
27.5°	815.8	808.0	753.4	650.2	560.8	501.7	460.6	438.4	425.5	424.6
30°	878.3	874.4	748.0	598.3	492.1	443.8	424.0	411.1	401.5	401.2
32.5°	977.9	946.4	730.3	535.0	429.4	402.7	394.6	386.8	379.3	379.3
35°	1106.0	1004.6	696.7	467.2	391.3	379.9	369.7	357.4	347.5	346.9
37.5°	1256.6	1040.6	636.4	412.6	373.3	364.6	349.6	331.3	313.9	310.9
40°	1408.7	1051.4	551.5	379.0	361.9	349.3	331.0	309.4	292.6	291.7
42.5°	1548.3	1030.7	461.5	355.9	350.5	333.7	314.5	295.3	282.0	281.7
45°	1665.3	977.0	385.9	334.0	338.5	319.6	302.5	286.8	276.6	274.5
47.5°	1775.4	901.1	332.8	310.9	326.5	311.8	297.4	282.6	272.7	271.2
50°	1903.2	819.1	295.6	288.3	316.0	309.1	301.6	286.2	269.7	267.9
52.5°	2058.1	748.3	266.4	268.5	307.9	312.7	312.4	296.5	267.6	265.2
55°	2230.9	669.7	244.5	252.3	304.6	319.3	315.1	306.1	269.4	265.8
57.5°	2401.0	577.9	229.2	240.0	299.8	318.7	302.2	289.2	273.6	268.5
60°	2528.5	454.6	217.5	229.2	289.2	308.8	288.0	270.9	272.7	268.8
62.5°	2536.9	351.4	203.4	219.9	273.3	298.9	278.7	262.8	276.6	273.0
65°	2387.8	265.5	189.9	208.8	256.2	292.6	269.7	258.3	284.7	280.8
67.5°	2010.3	213.6	178.5	197.4	239.1	279.3	261.6	254.1	292.0	285.0
70°	1451.4	182.1	167.4	183.6	223.8	264.3	254.4	246.6	272.4	261.6
72.5°	893.6	157.8	154.8	165.3	212.1	248.7	243.6	232.5	245.4	236.7
75°	446.2	136.8	140.7	147.3	195.6	231.0	225.6	214.5	216.3	214.5
77.5°	213.6	117.0	124.2	129.3	174.3	210.9	205.2	193.8	191.7	192.0
80°	135.3	97.8	104.7	108.3	155.7	187.5	181.8	170.4	194.4	180.3
82.5°	84.6	79.5	81.3	87.9	135.6	163.2	155.7	145.5	175.2	138.6
85°	46.8	55.5	57.9	63.6	104.4	136.5	129.0	116.1	104.1	102.3
87.5°	27.9	33.0	33.9	38.1	70.2	98.7	87.3	82.8	68.7	68.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)