

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: P299162

Luminaire Tested: **GLNA-AF-02-LED-E1-T3-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299162  
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-T3-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9486 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 85  
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

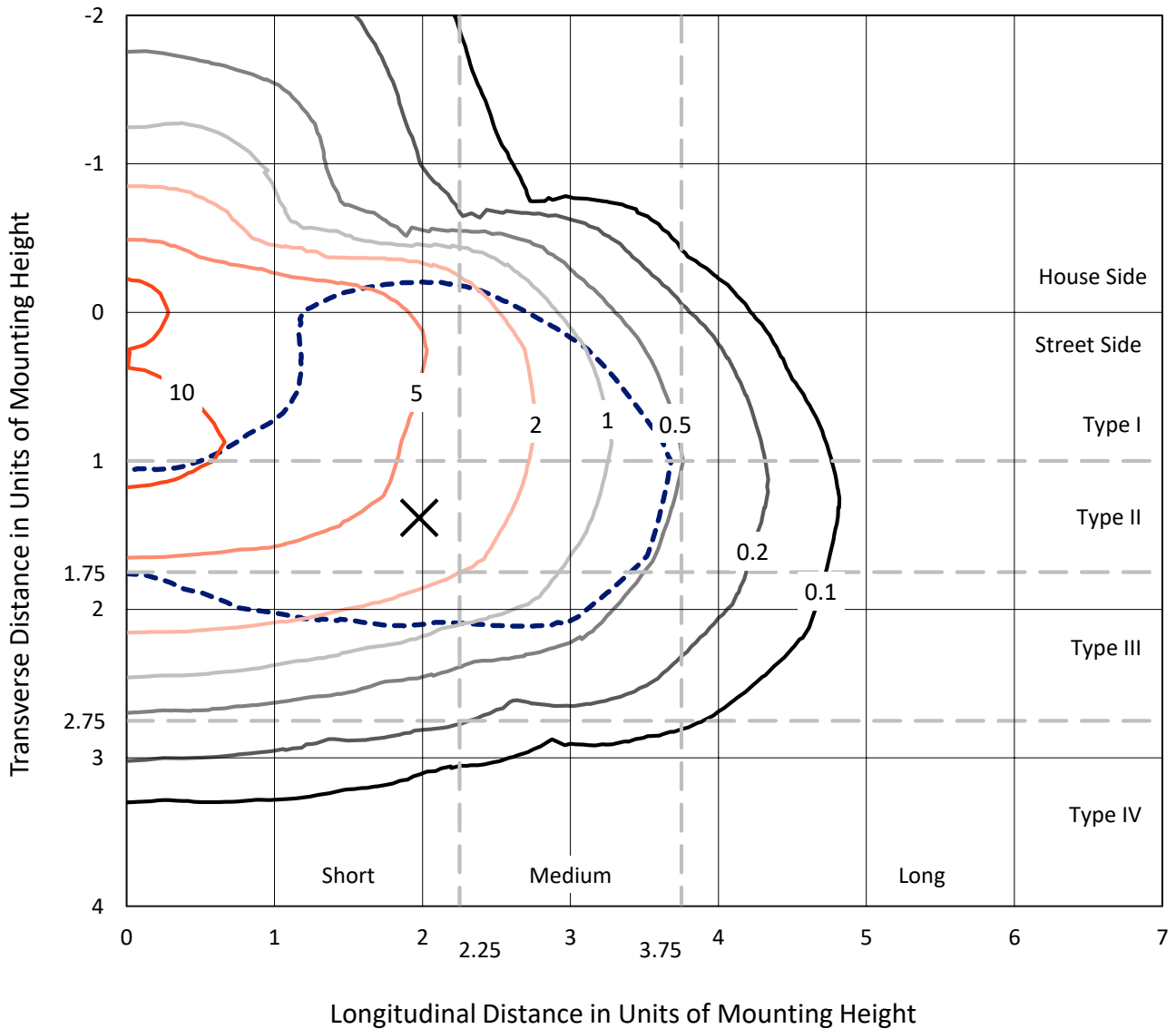


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### Iso-Footcandle Lines of Horizontal Illumination

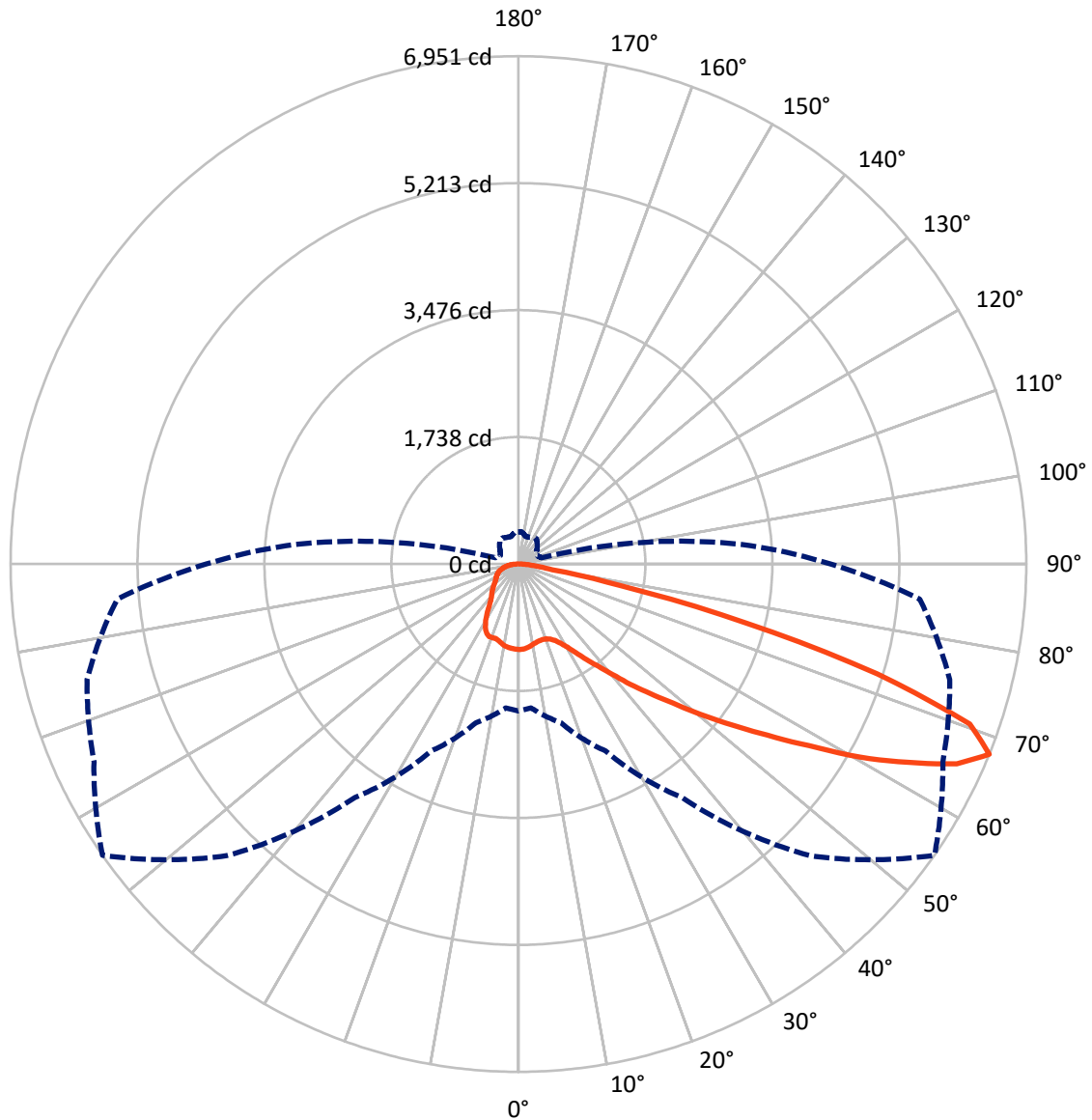
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.1 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	2049.2	0.0	2049.2
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	7436.8	0.0	7436.8
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	9486.0	0.0	9486.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.2	1.2
10°-20°	309.2	3.3
20°-30°	518.0	5.5
30°-40°	851.8	9.0
40°-50°	1433.8	15.1
50°-60°	2256.7	23.8
60°-70°	2693.1	28.4
70°-80°	1156.5	12.2
80°-90°	157.7	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°	9486.0	100.0
0°-180°	9486.0	100.0



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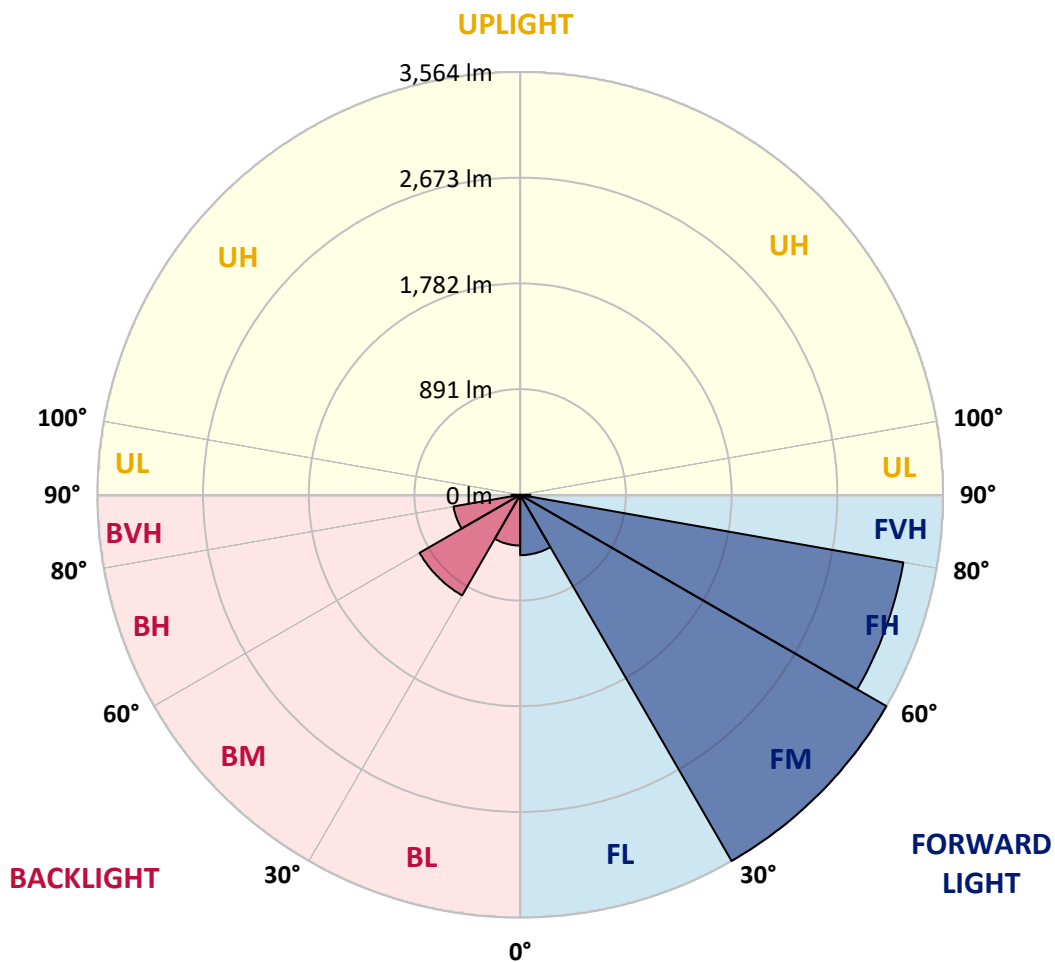
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	508.5	5.4			
FM	(30°-60°)	3563.6	37.6			
FH	(60°-80°)	3279.3	34.6			G2/5000
FVH	(80°-90°)	85.4	0.9			G1/100
BL	(0°-30°)	427.9	4.5	B1/500		
BM	(30°-60°)	978.7	10.3	B1/1000		
BH	(60°-80°)	570.3	6.0	B2/1000		G2/1000
BVH	(80°-90°)	72.3	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7
2.5°	1159.6	1160.1	1161.0	1164.7	1167.9	1167.0	1167.4	1165.6	1165.1	1162.4	1165.1
5°	1145.0	1146.4	1146.8	1152.8	1156.4	1157.4	1156.0	1153.7	1150.9	1148.2	1149.6
7.5°	1111.5	1115.2	1115.7	1123.9	1129.9	1137.7	1138.1	1138.6	1137.2	1135.4	1138.1
10°	1090.5	1091.4	1090.9	1096.9	1101.5	1110.2	1115.2	1123.9	1127.6	1128.5	1130.3
12.5°	1089.1	1088.2	1086.8	1086.8	1085.4	1089.1	1098.2	1110.6	1119.3	1122.1	1124.4
15°	1103.7	1103.3	1098.7	1091.8	1083.1	1080.4	1088.2	1101.9	1113.4	1119.3	1121.6
17.5°	1136.7	1134.0	1126.7	1111.1	1092.3	1085.0	1085.9	1097.3	1110.6	1118.4	1120.7
20°	1197.2	1197.2	1181.6	1152.3	1118.9	1101.5	1093.2	1100.1	1112.9	1123.4	1126.7
22.5°	1301.7	1302.6	1276.5	1228.4	1172.0	1134.9	1114.3	1112.9	1128.0	1139.9	1143.6
25°	1449.7	1446.0	1409.3	1340.6	1254.9	1193.5	1157.8	1149.6	1162.4	1175.7	1180.3
27.5°	1621.9	1608.7	1565.1	1482.2	1371.3	1281.5	1226.5	1213.2	1225.6	1240.7	1245.3
30°	1792.4	1778.6	1726.9	1636.1	1512.9	1399.3	1320.5	1298.9	1316.3	1337.9	1340.6
32.5°	1962.8	1962.8	1905.1	1799.3	1665.0	1539.9	1445.5	1419.9	1448.8	1474.9	1480.8
35°	2166.7	2167.6	2111.7	1984.4	1840.0	1707.6	1603.6	1584.8	1628.4	1646.7	1660.9
37.5°	2417.3	2422.4	2350.4	2196.5	2038.4	1899.1	1775.4	1749.8	1793.3	1843.2	1889.1
40°	2688.1	2694.5	2615.3	2425.6	2267.5	2121.8	1988.0	1941.7	2014.1	2109.4	2168.5
42.5°	2946.5	2979.5	2903.0	2707.8	2537.8	2387.1	2251.5	2184.1	2274.8	2418.7	2470.0
45°	3319.9	3343.8	3210.4	3033.6	2873.7	2705.1	2525.5	2454.4	2581.4	2762.8	2773.3
47.5°	3568.7	3550.9	3483.1	3373.1	3271.8	3114.2	2843.9	2766.0	2934.6	3148.1	3089.0
50°	3701.1	3706.6	3697.5	3703.9	3707.6	3608.6	3234.3	3127.5	3328.6	3586.6	3450.5
52.5°	3824.9	3788.2	3818.4	3968.7	4150.2	4113.5	3659.0	3547.7	3751.1	4073.2	3832.6
55°	3822.1	3766.2	3864.7	4130.0	4523.6	4565.7	4136.0	4007.7	4197.8	4595.0	4237.7
57.5°	3686.9	3689.7	3841.3	4188.6	4783.8	4990.9	4689.4	4497.0	4671.6	5123.8	4607.4
60°	3500.9	3526.1	3744.7	4179.0	4992.3	5339.6	5368.4	5024.4	5135.7	5604.4	4913.5
62.5°	3200.8	3227.4	3528.9	4079.1	4960.7	5675.4	5982.4	5622.7	5620.9	5895.8	5003.3
65°	2727.5	2719.7	3036.3	3705.7	4695.4	5923.8	6592.2	6140.0	5986.5	5900.4	4822.8
67.5°	2011.4	1976.6	2248.3	2822.4	3902.7	5645.6	6951.0	6409.4	6111.2	5512.3	4271.1
70°	1043.7	1008.9	1228.8	1648.1	2566.7	4406.3	6553.7	6270.1	5835.8	4620.7	3346.1
72.5°	446.3	440.3	529.7	723.0	1241.7	2541.5	5138.9	5427.1	5007.4	3442.7	2300.5
75°	300.1	298.3	331.7	394.0	558.5	1031.4	3215.9	3852.3	3663.6	2134.6	1293.9
77.5°	235.5	233.2	252.9	283.2	362.0	406.9	1427.2	2068.2	1914.3	929.2	566.3
80°	184.2	182.4	194.7	211.2	260.2	256.6	469.6	822.9	636.9	356.0	275.4
82.5°	145.2	145.2	155.3	155.8	184.6	175.0	245.1	362.4	318.0	207.6	168.6
85°	132.9	132.9	143.4	116.4	120.5	110.4	152.1	214.9	201.6	85.2	73.3
87.5°	66.9	65.1	120.5	103.1	65.5	58.6	74.2	104.0	111.8	47.2	36.7
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°	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7	1169.7
2.5°	1164.2	1163.8	1164.7	1165.1	1168.8	1173.8	1176.1	1179.3	1181.2	1180.3
5°	1150.5	1151.4	1155.1	1157.8	1164.2	1172.5	1177.1	1180.7	1183.9	1182.6
7.5°	1139.0	1141.3	1146.8	1149.1	1152.8	1155.1	1154.6	1156.0	1158.7	1155.5
10°	1132.6	1135.4	1139.5	1136.3	1127.6	1115.2	1103.7	1097.8	1099.6	1097.3
12.5°	1126.2	1129.9	1126.7	1111.5	1087.3	1071.2	1062.5	1063.4	1067.6	1068.5
15°	1122.5	1123.9	1110.2	1081.8	1057.0	1054.7	1059.3	1058.4	1058.8	1058.8
17.5°	1122.5	1118.9	1093.2	1064.8	1054.3	1050.1	1035.9	1018.1	1010.3	1007.5
20°	1128.5	1118.9	1087.7	1068.9	1046.0	1010.7	973.2	940.2	925.5	921.4
22.5°	1146.4	1129.9	1103.3	1070.8	1005.7	946.6	887.0	847.6	821.1	816.5
25°	1182.6	1164.2	1134.0	1046.5	941.6	857.2	789.4	745.5	718.9	715.2
27.5°	1245.8	1233.9	1150.5	992.9	856.3	766.1	703.3	669.4	649.7	648.3
30°	1341.1	1335.1	1142.2	913.6	751.4	677.6	647.4	627.7	613.0	612.6
32.5°	1493.2	1445.1	1115.2	816.9	655.6	614.9	602.5	590.6	579.1	579.1
35°	1688.8	1534.0	1063.9	713.4	597.5	580.1	564.5	545.7	530.6	529.7
37.5°	1918.8	1589.0	971.8	630.0	570.0	556.7	533.8	505.8	479.3	474.7
40°	2151.1	1605.4	842.1	578.7	552.6	533.3	505.4	472.4	446.7	445.3
42.5°	2364.2	1573.8	704.7	543.4	535.1	509.5	480.2	450.8	430.7	430.2
45°	2542.9	1491.8	589.2	509.9	516.8	488.0	461.8	438.0	422.4	419.2
47.5°	2711.0	1375.9	508.1	474.7	498.5	476.0	454.1	431.6	416.5	414.2
50°	2906.2	1250.8	451.3	440.3	482.5	471.9	460.5	437.1	411.9	409.2
52.5°	3142.6	1142.7	406.9	410.1	470.1	477.4	477.0	452.7	408.7	405.0
55°	3406.5	1022.6	373.4	385.3	465.0	487.5	481.1	467.3	411.4	405.9
57.5°	3666.3	882.4	350.0	366.5	457.7	486.6	461.4	441.7	417.9	410.1
60°	3861.0	694.1	332.2	350.0	441.7	471.5	439.8	413.7	416.5	410.5
62.5°	3873.9	536.5	310.6	335.8	417.4	456.3	425.6	401.4	422.4	416.9
65°	3646.2	405.5	290.0	318.9	391.3	446.7	411.9	394.5	434.8	428.9
67.5°	3069.8	326.2	272.6	301.5	365.2	426.6	399.5	388.1	445.8	435.3
70°	2216.2	278.1	255.7	280.4	341.8	403.7	388.5	376.6	416.0	399.5
72.5°	1364.4	241.0	236.4	252.5	323.9	379.8	372.0	355.1	374.8	361.5
75°	681.3	208.9	214.9	225.0	298.7	352.8	344.5	327.6	330.3	327.6
77.5°	326.2	178.7	189.7	197.5	266.2	322.1	313.4	296.0	292.8	293.2
80°	206.6	149.4	159.9	165.4	237.8	286.4	277.7	260.2	296.9	275.4
82.5°	129.2	121.4	124.2	134.2	207.1	249.2	237.8	222.2	267.6	211.7
85°	71.5	84.8	88.4	97.1	159.4	208.5	197.0	177.3	159.0	156.2
87.5°	42.6	50.4	51.8	58.2	107.2	150.7	133.3	126.5	104.9	104.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)