

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: P451979

Luminaire Tested: **GALN-SA2D-827-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451979  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2D-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11655 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

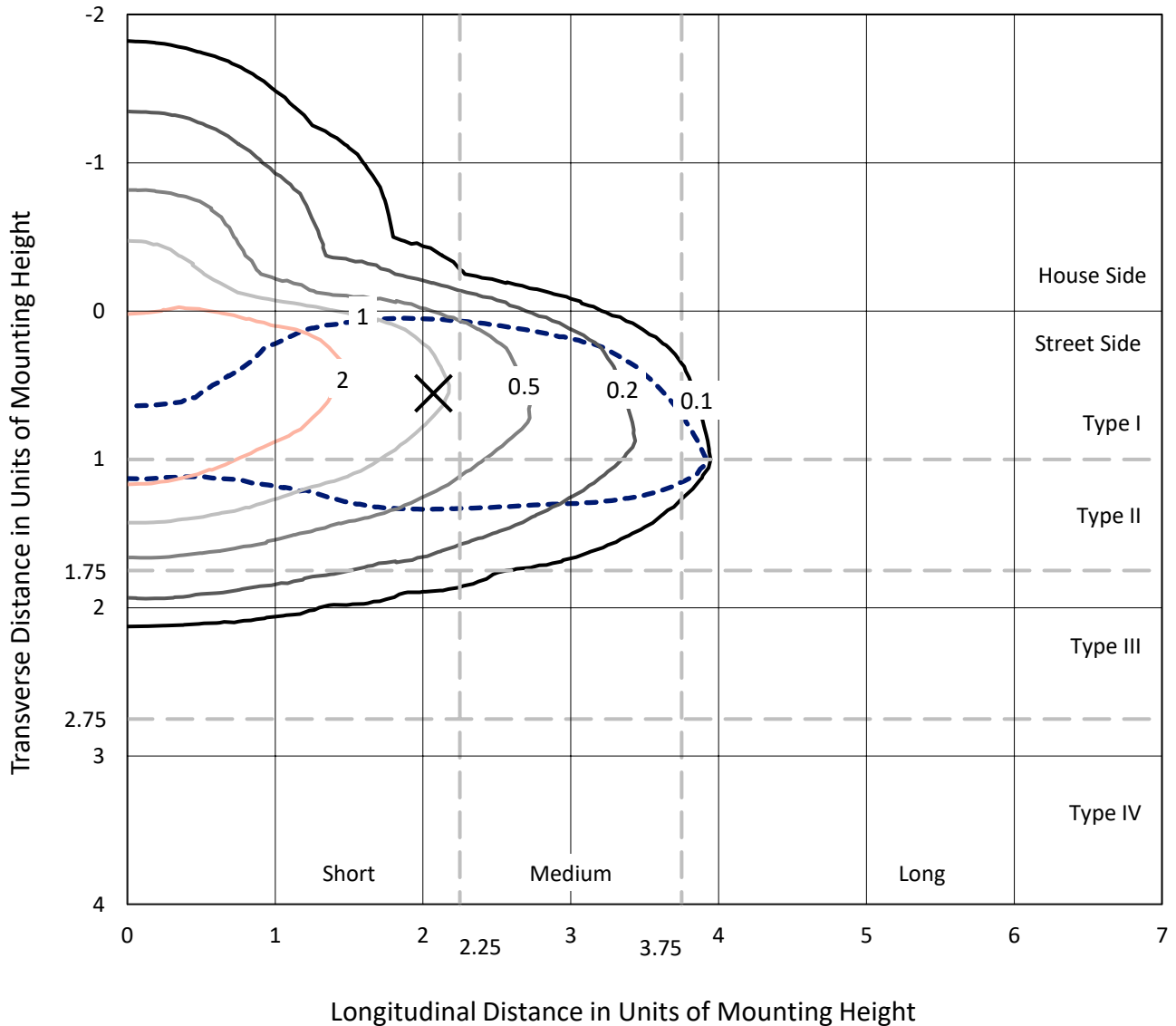
Input Watts (W): 125  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

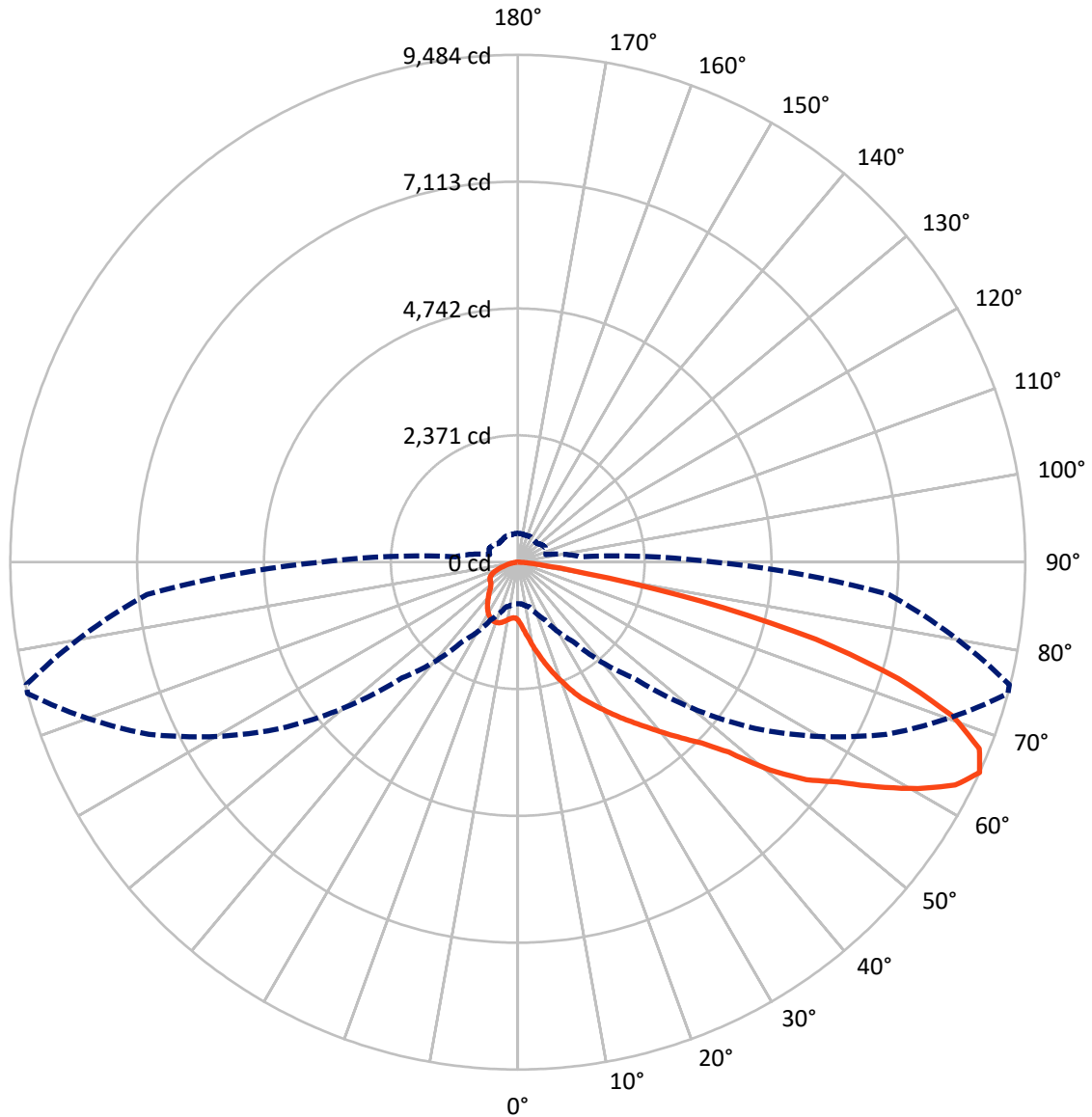
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1959.4	0.0	1959.4
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	9695.7	0.0	9695.7
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	11655.0	0.0	11655.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.6	1.1
10°-20°	515.3	4.4
20°-30°	995.5	8.5
30°-40°	1616.9	13.9
40°-50°	2224.2	19.1
50°-60°	2626.0	22.5
60°-70°	2300.9	19.7
70°-80°	1098.4	9.4
80°-90°	146.2	1.3
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°	11655.0	100.0
0°-180°	11655.0	100.0

**Coefficient of Utilization**



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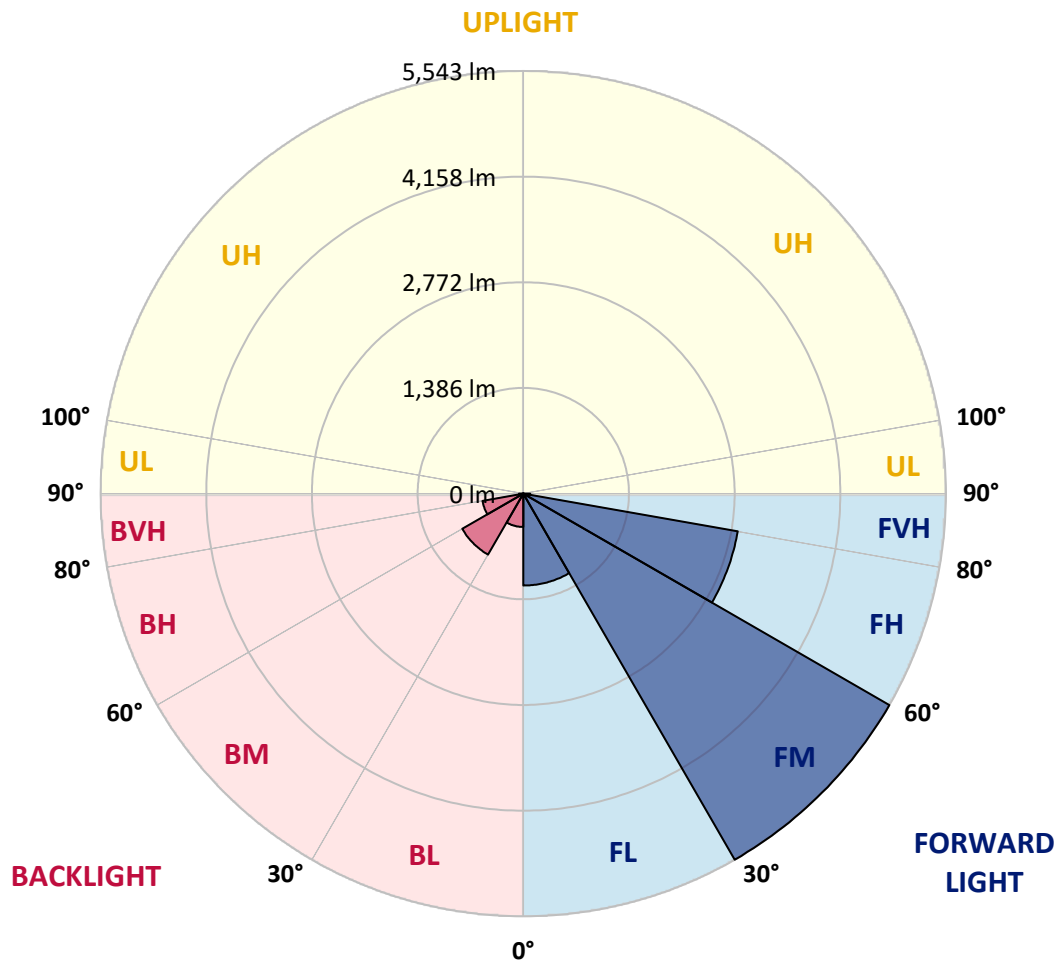
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1204.9	10.3			
FM (30°-60°)	5543.4	47.6			
FH (60°-80°)	2856.0	24.5			G2/5000
FVH (80°-90°)	91.3	0.8			G1/100
BL (0°-30°)	437.4	3.8	B1/500		
BM (30°-60°)	923.8	7.9	B1/1000		
BH (60°-80°)	543.3	4.7	B2/1000		G2/1000
BVH (80°-90°)	54.8	0.5			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9
2.5°	1438.8	1429.3	1419.2	1391.4	1361.7	1328.2	1280.1	1234.0	1172.7	1170.8	1125.3
5°	1837.7	1831.4	1786.5	1760.6	1691.7	1600.0	1522.3	1401.5	1289.6	1276.3	1187.8
7.5°	2204.4	2179.7	2162.6	2115.9	2047.6	1930.0	1779.5	1616.4	1429.3	1411.6	1265.0
10°	2480.6	2478.1	2469.2	2428.8	2377.6	2260.6	2093.7	1859.8	1606.3	1571.6	1358.5
12.5°	2687.3	2689.2	2688.0	2687.3	2650.7	2551.4	2370.6	2124.1	1785.2	1760.6	1466.6
15°	2823.2	2842.2	2849.8	2881.4	2884.6	2818.2	2662.7	2379.5	1986.9	1950.2	1582.9
17.5°	2913.0	2922.5	2957.9	3011.6	3055.2	3043.2	2904.8	2615.9	2193.0	2131.7	1703.7
20°	2999.0	3015.4	3042.6	3115.9	3193.1	3228.5	3131.1	2858.0	2397.2	2358.0	1837.1
22.5°	3177.9	3201.3	3210.8	3248.1	3313.8	3376.4	3332.1	3090.0	2621.0	2567.8	1978.7
25°	3480.7	3505.3	3478.8	3469.9	3491.4	3522.4	3512.9	3308.7	2832.1	2756.2	2112.7
27.5°	3875.2	3878.3	3826.5	3777.2	3724.1	3708.3	3679.2	3502.8	3015.4	2952.2	2247.3
30°	4298.7	4283.5	4197.6	4108.4	4018.7	3930.2	3846.7	3689.9	3219.6	3146.9	2379.5
32.5°	4691.9	4683.7	4588.2	4449.8	4298.1	4214.6	4045.8	3879.0	3438.3	3368.2	2515.4
35°	4986.5	4998.5	4893.6	4742.5	4576.9	4502.9	4289.9	4077.5	3664.7	3588.2	2663.3
37.5°	5195.8	5189.4	5096.5	4965.6	4820.2	4755.8	4575.0	4294.3	3908.0	3834.7	2825.1
40°	5270.4	5266.6	5197.7	5102.2	5009.9	4987.1	4873.4	4528.2	4186.8	4100.8	3019.8
42.5°	5222.9	5231.2	5185.6	5159.7	5142.7	5159.1	5169.8	4834.8	4490.9	4411.9	3231.0
45°	5077.5	5073.1	5066.8	5109.1	5205.2	5313.3	5463.2	5124.3	4821.5	4758.3	3514.2
47.5°	4817.7	4849.3	4865.1	4982.1	5192.0	5448.0	5800.7	5512.5	5301.3	5246.3	3946.0
50°	4454.2	4479.5	4573.1	4781.1	5094.0	5498.6	6130.7	6147.2	6101.6	5998.6	4415.0
52.5°	3886.5	3925.7	4118.5	4499.7	4892.9	5477.7	6330.5	6691.5	6751.5	6674.4	4877.1
55°	3251.2	3306.2	3509.8	4009.8	4616.1	5363.9	6468.3	7006.9	7246.5	7175.1	5322.2
57.5°	2629.2	2687.3	2896.6	3380.8	4133.1	5112.3	6558.7	7358.4	7920.4	7827.5	5876.0
60°	1970.5	2031.1	2210.7	2709.5	3445.3	4620.5	6497.4	7663.1	8593.6	8553.8	6430.4
62.5°	1271.3	1338.3	1494.4	1907.2	2648.1	3948.5	6169.3	7831.2	9176.5	9128.4	6835.0
65°	774.4	782.0	868.0	1184.0	1812.4	3057.1	5418.9	7608.1	9483.7	9469.2	6958.2
67.5°	500.7	512.7	551.9	709.3	1086.7	2123.4	4332.9	6871.6	9304.2	9299.1	6703.5
70°	422.9	426.7	444.4	478.5	631.5	1287.7	3042.6	5697.7	8622.1	8622.1	6090.9
72.5°	378.0	383.1	389.4	400.2	450.7	729.5	1815.6	4435.3	7444.4	7493.7	5184.4
75°	343.3	342.0	345.8	347.7	384.4	476.7	938.8	3280.3	5759.0	5660.4	3754.4
77.5°	294.0	295.9	294.0	302.2	339.5	362.9	476.7	2201.2	3490.2	3362.5	1884.5
80°	241.5	244.6	247.8	252.9	290.2	275.6	286.4	1003.2	1290.9	1263.7	582.2
82.5°	181.4	185.9	190.9	202.9	228.2	182.1	180.8	428.6	465.9	426.7	214.3
85°	73.3	86.6	130.9	142.9	143.5	99.9	111.3	178.9	190.3	185.9	84.1
87.5°	17.1	20.2	42.4	63.8	58.8	37.3	41.1	58.2	66.4	61.3	28.4
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°	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9	1082.9
2.5°	1104.4	1082.3	1044.3	1015.3	994.4	976.1	964.7	957.7	955.2	954.6	955.2
5°	1141.7	1102.5	1042.4	1004.5	983.6	971.6	964.7	964.0	964.7	965.3	963.4
7.5°	1192.9	1136.6	1058.2	1022.8	1007.0	998.2	995.0	993.8	994.4	993.8	993.8
10°	1261.2	1184.0	1089.2	1052.6	1039.3	1029.2	1024.1	1020.9	1018.4	1015.9	1014.6
12.5°	1336.4	1236.5	1122.7	1087.3	1068.4	1052.6	1041.2	1033.0	1027.3	1021.6	1020.3
15°	1420.5	1292.1	1160.0	1110.7	1083.5	1060.1	1040.5	1027.3	1017.2	1008.9	1008.3
17.5°	1500.8	1344.6	1185.3	1121.5	1081.6	1048.8	1022.8	1004.5	991.9	981.1	979.9
20°	1586.7	1394.6	1196.7	1114.5	1062.7	1022.8	988.7	966.6	952.0	940.0	938.1
22.5°	1673.3	1436.9	1195.4	1092.4	1029.8	983.0	947.0	923.6	906.5	894.5	890.1
25°	1756.2	1471.0	1179.6	1057.0	984.3	935.6	898.9	877.4	862.3	847.7	847.7
27.5°	1830.7	1491.3	1149.9	1014.0	937.5	886.3	857.2	837.6	823.7	814.2	808.5
30°	1904.1	1500.8	1109.4	959.6	888.2	844.6	821.2	809.8	797.2	786.4	785.1
32.5°	1969.8	1498.9	1058.9	906.5	841.4	810.4	801.0	792.1	778.8	763.7	759.9
35°	2033.7	1486.2	998.8	848.4	802.2	790.2	792.7	780.1	756.1	737.1	733.9
37.5°	2103.2	1463.5	933.1	801.0	769.3	780.7	787.0	759.2	720.0	690.3	683.4
40°	2183.5	1437.5	864.8	753.5	743.4	771.9	771.9	720.7	666.9	648.6	643.5
42.5°	2277.7	1416.0	807.9	713.7	721.9	750.4	747.2	669.5	647.3	637.9	635.3
45°	2426.9	1408.5	749.1	678.9	704.2	725.1	699.2	651.8	639.1	631.5	629.0
47.5°	2662.7	1417.3	697.3	653.0	684.0	699.8	645.4	639.7	630.9	620.2	618.9
50°	2881.4	1409.1	660.6	638.5	666.3	669.5	623.3	625.2	620.2	608.1	605.6
52.5°	3060.3	1383.2	637.2	630.9	651.1	616.4	602.5	609.4	607.5	592.3	589.8
55°	3256.9	1367.4	625.8	630.9	641.0	570.2	582.9	593.0	590.4	579.7	579.1
57.5°	3495.2	1370.5	617.6	632.8	630.9	546.8	563.3	575.3	574.6	571.5	571.5
60°	3739.2	1371.8	605.0	632.2	618.9	528.5	543.0	560.1	561.4	563.3	563.3
62.5°	3820.2	1316.8	580.3	620.8	592.3	510.8	524.1	547.5	546.2	551.2	551.9
65°	3669.1	1164.4	543.7	594.9	558.2	498.1	509.5	531.0	524.1	537.3	539.9
67.5°	3339.7	963.4	486.8	548.1	520.3	484.9	500.0	508.3	495.6	521.5	522.2
70°	2886.5	752.3	414.7	481.7	477.3	471.0	492.5	479.8	462.1	493.7	487.4
72.5°	2413.6	574.6	331.3	393.8	419.8	450.1	479.2	443.1	418.5	428.0	416.6
75°	1813.0	424.8	266.1	308.5	349.6	420.4	467.2	398.9	361.0	352.1	349.6
77.5°	924.2	277.5	199.1	230.7	262.3	379.9	450.7	347.1	299.0	285.1	278.8
80°	330.0	172.6	140.3	159.3	177.0	326.8	393.8	287.0	232.0	229.5	232.0
82.5°	153.0	111.3	94.2	104.3	104.9	218.1	300.3	214.3	176.4	268.0	226.3
85°	65.7	55.6	53.1	51.8	48.0	97.4	168.8	115.1	179.5	80.3	74.0
87.5°	19.6	22.1	19.6	14.5	10.7	10.7	17.1	6.3	4.4	3.2	3.2
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)