

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: P451818

Luminaire Tested: **GALN-SA2D-727-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-727-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13138 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

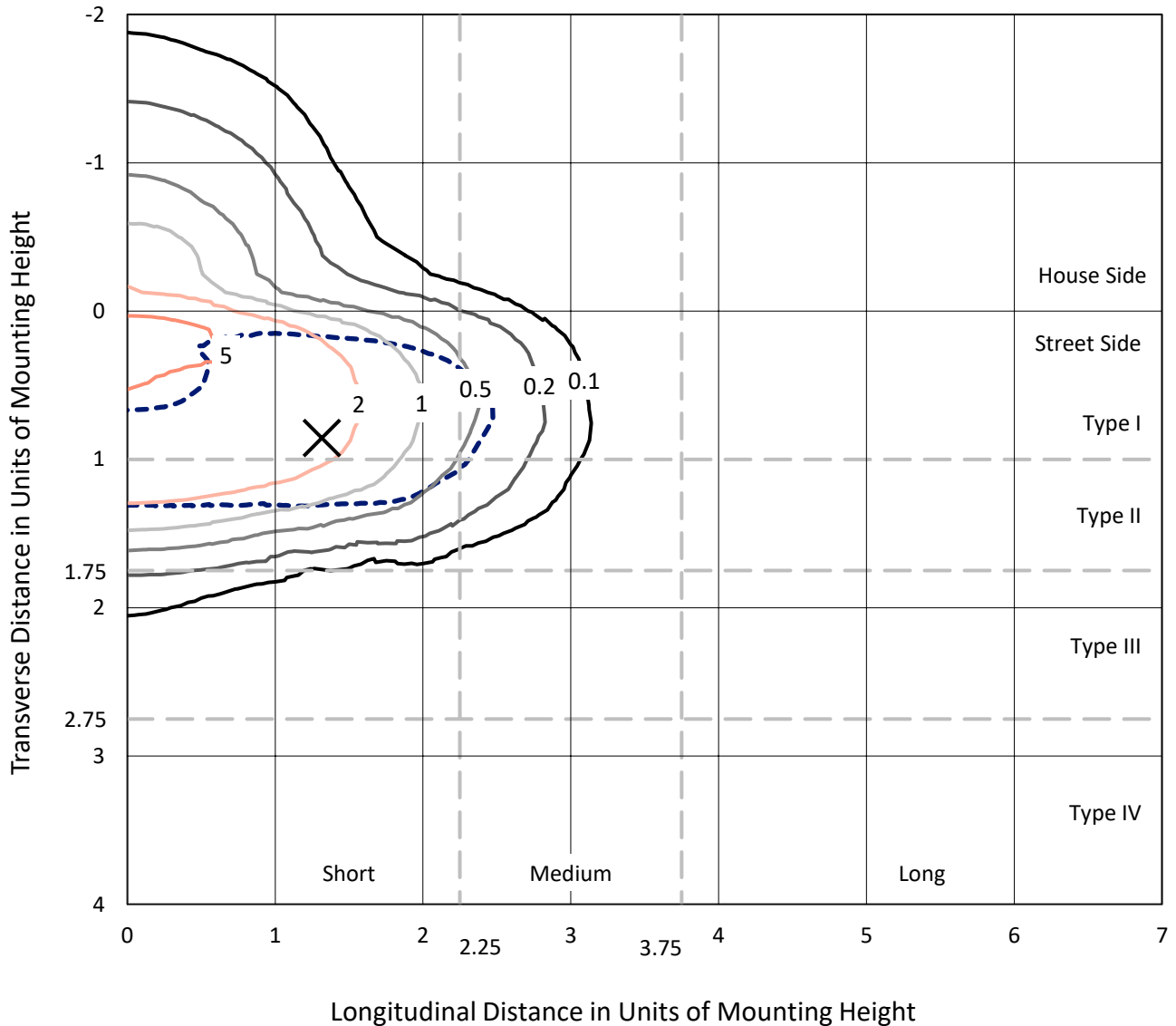
Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P451818
 CATALOG NUMBER: GALN-SA2D-727-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

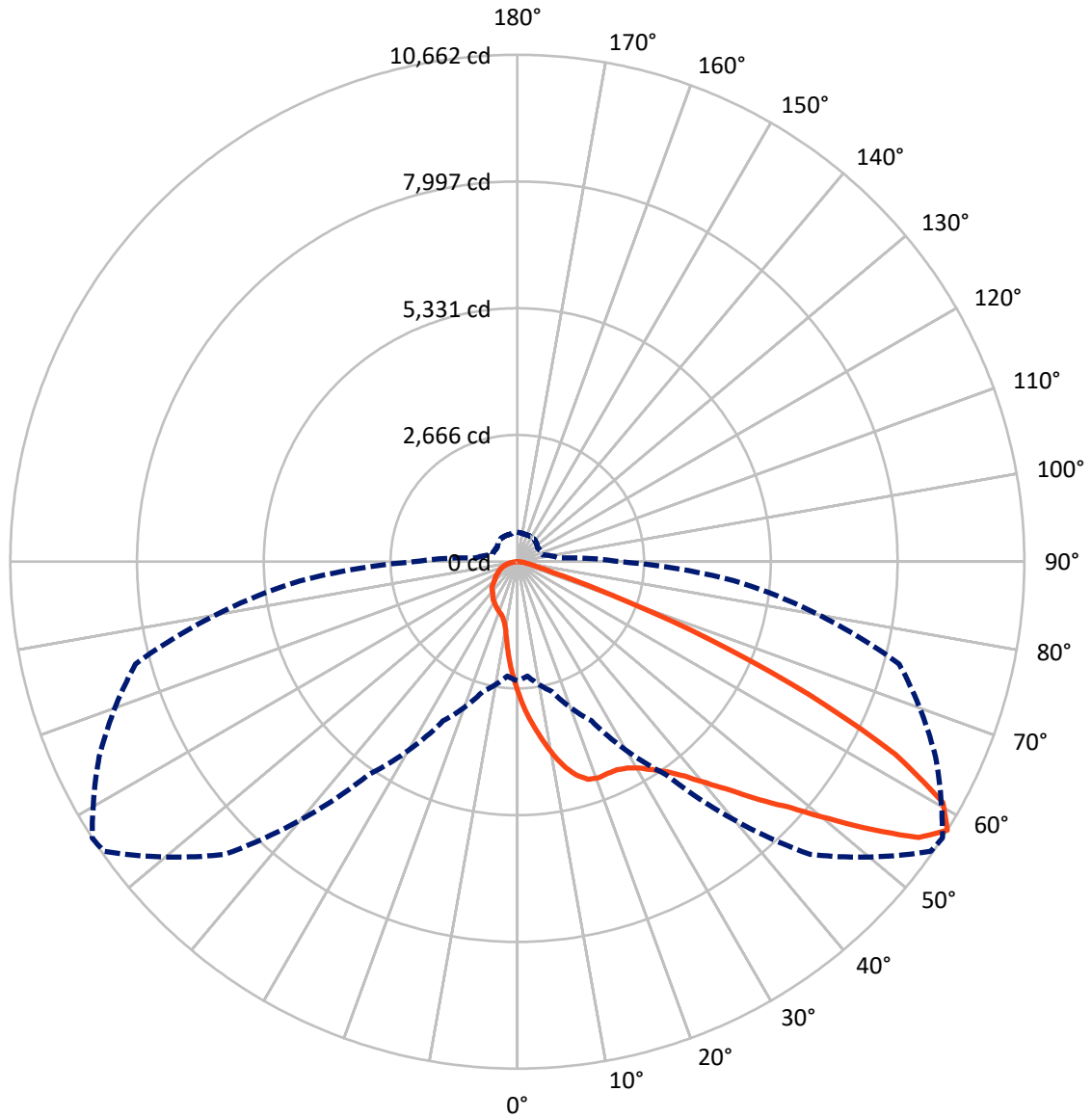
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - N/A

REPORT NUMBER: P451818
CATALOG NUMBER: GALN-SA2D-727-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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CATALOG NUMBER: GALN-SA2D-727-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1997.9	0.0	1997.9
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	11140.1	0.0	11140.1
	% Fixture	84.8	0.0	84.8
Total	Lumens	13138.0	0.0	13138.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.3	2.0
10°-20°	781.8	6.0
20°-30°	1298.2	9.9
30°-40°	1955.4	14.9
40°-50°	2935.9	22.3
50°-60°	3290.8	25.0
60°-70°	1925.9	14.7
70°-80°	569.7	4.3
80°-90°	115.1	0.9
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°	13138.0	100.0
0°-180°	13138.0	100.0

Coefficient of Utilization



REPORT NUMBER: P451818

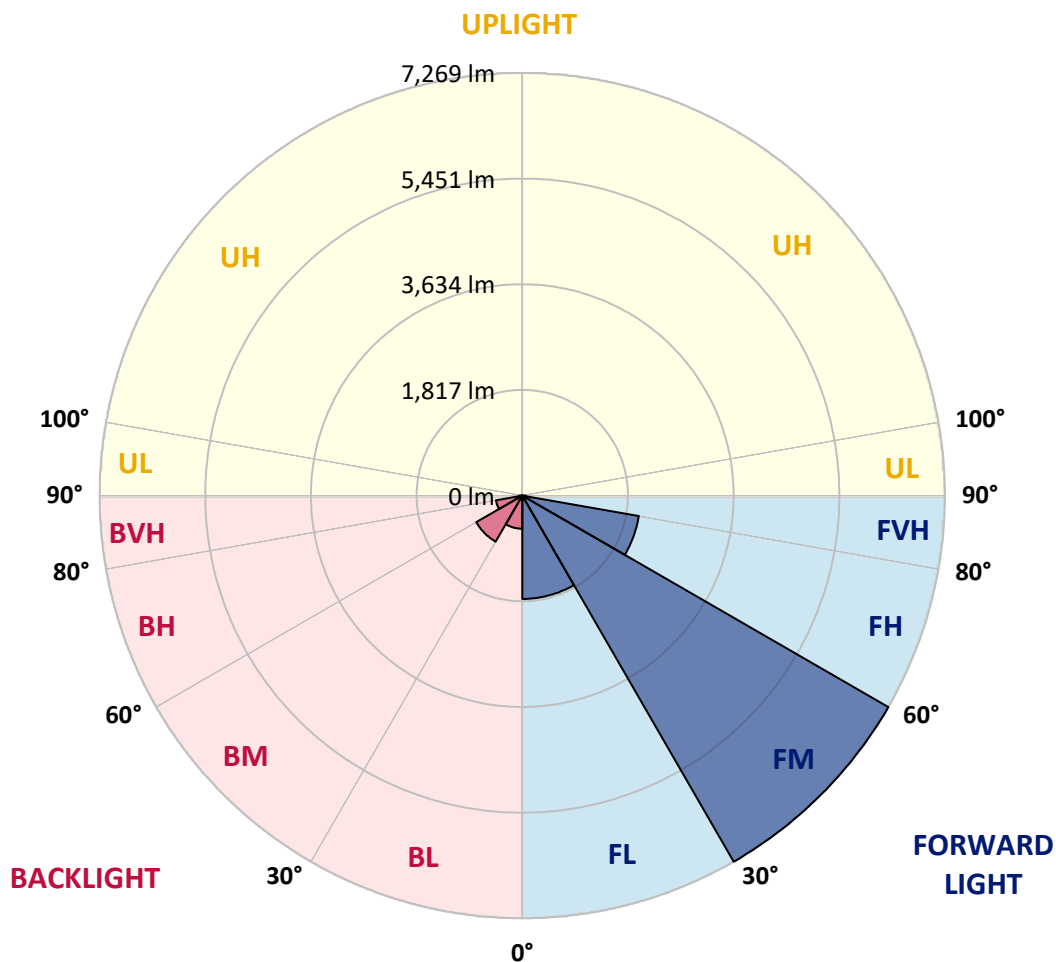
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1776.0	13.5			
FM	(30°-60°)	7268.5	55.3			
FH	(60°-80°)	2035.9	15.5			G2/5000
FVH	(80°-90°)	59.7	0.5			G1/100
BL	(0°-30°)	569.3	4.3	B2/1000		
BM	(30°-60°)	913.5	7.0	B1/1000		
BH	(60°-80°)	459.7	3.5	B1/500		G1/500
BVH	(80°-90°)	55.4	0.4			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





REPORT NUMBER: P451818

CATALOG NUMBER: GALN-SA2D-727-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1
2.5°	3429.7	3392.3	3362.8	3336.9	3303.1	3211.8	3120.4	3119.0	3046.4	2934.2	2819.1
5°	3988.5	3938.1	3944.6	3864.1	3783.5	3651.2	3457.7	3447.7	3293.0	3083.0	2869.5
7.5°	4352.4	4353.1	4333.0	4286.9	4199.9	4049.6	3830.3	3780.6	3565.6	3247.0	2927.0
10°	4333.7	4353.1	4386.9	4426.4	4453.1	4379.0	4179.0	4118.6	3838.9	3445.5	2991.0
12.5°	4084.8	4115.0	4163.2	4262.5	4422.8	4545.1	4476.8	4427.9	4155.3	3643.3	3061.5
15°	3929.5	3947.5	3974.1	4041.0	4213.6	4506.3	4683.2	4657.3	4453.8	3866.9	3140.6
17.5°	3882.0	3900.0	3908.6	3949.6	4072.6	4372.5	4764.4	4810.5	4718.4	4072.6	3220.4
20°	3929.5	3938.1	3938.1	3962.6	4058.9	4294.1	4760.9	4853.6	4935.6	4319.3	3295.2
22.5°	4053.9	4057.5	4052.5	4061.1	4133.0	4315.7	4727.1	4842.1	5111.1	4528.6	3353.5
25°	4256.0	4261.8	4228.7	4208.5	4261.0	4410.6	4745.7	4851.5	5248.4	4728.5	3392.3
27.5°	4485.4	4492.6	4452.3	4405.6	4430.0	4527.8	4819.1	4914.0	5351.3	4925.5	3416.7
30°	4766.6	4769.5	4701.9	4645.8	4630.0	4702.6	4944.2	5032.7	5479.3	5157.8	3453.4
32.5°	5054.3	5075.8	4988.8	4909.7	4883.1	4905.4	5129.1	5214.6	5631.8	5407.4	3512.4
35°	5445.5	5449.1	5344.8	5248.4	5160.7	5189.5	5365.7	5427.5	5842.5	5695.8	3595.8
37.5°	5933.8	5966.9	5823.1	5643.3	5535.4	5493.7	5651.9	5719.5	6138.0	6049.6	3721.7
40°	6476.1	6488.3	6365.3	6253.1	6056.1	5935.2	6044.6	6117.9	6502.7	6471.7	3867.7
42.5°	6816.9	6843.5	6852.9	6841.4	6693.2	6490.4	6532.1	6566.7	6934.2	6868.0	4017.2
45°	6932.0	6971.6	7105.3	7388.7	7404.5	7204.6	7107.5	7140.6	7404.5	7267.9	4160.4
47.5°	6741.4	6809.0	7055.7	7636.8	8071.9	8087.0	7794.3	7721.6	7833.1	7599.4	4263.9
50°	6248.8	6263.2	6640.7	7482.2	8384.7	8930.6	8627.8	8492.6	8240.2	7844.6	4335.1
52.5°	5486.5	5503.0	5819.5	6763.7	8192.0	9520.3	9603.0	9361.3	8653.7	8035.2	4381.9
55°	4072.6	4168.3	4516.3	5429.0	7278.6	9464.9	10378.2	10240.9	9153.5	8186.2	4455.2
57.5°	2504.1	2416.4	2829.2	3693.6	5474.3	8704.0	10617.7	10662.3	9703.7	8312.8	4578.2
60°	1152.1	1169.4	1339.8	1905.1	3336.9	6809.0	10000.7	10282.6	10007.9	8308.5	4609.1
62.5°	794.0	778.1	735.0	836.4	1521.7	4306.3	8447.3	8924.8	9398.0	8050.3	4486.1
65°	709.8	694.0	610.6	582.5	699.0	1877.0	6140.9	6743.6	7912.9	7398.7	4179.8
67.5°	663.1	641.5	555.2	500.5	499.1	747.2	3621.0	4346.6	5869.1	6255.3	3621.7
70°	614.2	596.9	511.3	450.9	425.0	469.6	1591.5	2083.4	3810.8	4507.7	2821.3
72.5°	565.3	545.1	468.2	403.4	369.6	351.7	609.8	793.2	2153.2	2702.6	1729.6
75°	494.1	484.0	418.6	365.3	328.7	284.1	386.9	441.6	1029.8	1241.3	868.0
77.5°	432.2	421.4	371.8	319.3	292.7	230.9	274.7	299.9	434.4	503.4	391.9
80°	316.4	327.2	313.6	281.9	261.1	181.2	184.8	205.7	258.2	285.5	239.5
82.5°	200.6	220.8	241.6	217.2	197.8	143.1	128.0	135.9	176.2	187.0	106.4
85°	84.1	85.6	140.2	132.3	112.9	84.9	77.0	81.3	94.2	98.5	49.6
87.5°	32.4	31.6	49.6	46.0	35.2	24.5	24.5	27.3	37.4	34.5	15.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P451818
 CATALOG NUMBER: GALN-SA2D-727-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1	2760.1
2.5°	2769.5	2718.4	2617.0	2491.2	2399.1	2295.6	2204.2	2138.8	2114.3	2102.8	2081.3
5°	2767.3	2666.7	2456.7	2236.6	2059.7	1878.5	1725.3	1626.0	1617.4	1551.2	1544.8
7.5°	2768.1	2614.2	2279.7	1956.1	1686.4	1500.9	1374.3	1341.2	1301.7	1291.6	1296.6
10°	2770.2	2547.3	2089.9	1678.5	1417.5	1295.9	1248.5	1235.5	1237.0	1241.3	1242.0
12.5°	2773.1	2482.5	1892.8	1467.8	1266.4	1216.1	1211.1	1222.6	1234.8	1244.2	1246.3
15°	2776.7	2408.5	1700.8	1298.1	1190.9	1186.6	1203.2	1222.6	1239.8	1253.5	1255.7
17.5°	2772.4	2322.2	1539.7	1193.8	1149.2	1170.1	1197.4	1221.9	1237.7	1250.6	1252.1
20°	2762.3	2225.8	1384.4	1120.5	1123.3	1157.1	1186.6	1209.6	1226.9	1233.4	1238.4
22.5°	2723.5	2110.7	1249.2	1063.6	1092.4	1139.2	1174.4	1188.1	1168.6	1155.0	1158.6
25°	2657.3	1961.2	1123.3	1017.6	1064.4	1114.0	1149.9	1116.9	1101.0	1095.3	1098.2
27.5°	2574.6	1797.2	1028.4	969.4	1028.4	1085.9	1075.9	1070.1	1062.9	1053.6	1055.7
30°	2485.4	1636.8	947.9	932.0	989.6	1022.6	1027.0	1036.3	1028.4	1014.0	1019.8
32.5°	2402.7	1485.8	886.7	900.4	962.2	957.2	989.6	1000.4	963.7	915.5	917.7
35°	2332.2	1345.6	840.7	869.5	915.5	917.7	950.0	912.6	873.1	850.0	851.5
37.5°	2279.0	1236.2	810.5	842.9	855.8	883.1	865.9	846.5	841.4	825.6	826.3
40°	2247.4	1140.6	791.1	822.0	819.8	838.5	783.2	802.6	809.8	804.7	805.5
42.5°	2215.7	1073.0	770.9	793.2	792.5	755.8	743.6	760.2	778.9	781.0	779.6
45°	2190.6	1020.5	750.1	749.4	763.7	706.2	702.6	712.7	739.3	752.2	751.5
47.5°	2162.5	976.6	718.4	698.3	702.6	675.3	669.5	673.9	706.2	727.1	732.8
50°	2127.3	932.8	678.9	651.6	633.6	646.5	648.0	648.7	681.0	704.8	709.8
52.5°	2099.2	899.7	633.6	613.4	591.9	620.6	631.4	632.9	652.3	671.7	675.3
55°	2115.8	881.0	589.0	574.6	555.2	594.0	614.9	617.8	622.1	636.5	638.6
57.5°	2165.4	885.3	553.0	534.3	520.0	562.4	597.6	599.8	596.9	614.2	617.0
60°	2180.5	883.1	526.4	489.7	481.1	528.6	572.5	576.8	576.0	601.2	606.3
62.5°	2117.2	855.8	499.8	452.4	446.6	494.1	537.2	554.5	558.1	594.0	600.5
65°	1968.3	799.7	464.6	412.8	412.8	457.4	503.4	527.1	537.2	585.4	592.6
67.5°	1772.0	733.5	428.6	379.0	377.6	422.1	467.5	491.9	507.7	573.2	577.5
70°	1470.7	644.4	384.0	342.3	342.3	382.6	423.6	453.1	476.1	550.2	550.2
72.5°	1007.5	535.8	330.1	300.6	301.3	338.7	380.4	413.5	440.8	504.1	505.6
75°	637.2	418.6	271.1	256.0	258.9	294.1	337.3	371.8	426.5	498.4	500.5
77.5°	338.7	294.1	215.7	212.2	215.7	248.1	296.3	343.8	427.9	432.2	425.0
80°	219.3	208.6	170.4	163.2	164.7	199.9	263.9	326.5	343.8	348.1	332.3
82.5°	119.4	132.3	120.8	113.6	113.6	156.1	225.1	259.6	246.7	205.0	195.6
85°	51.1	61.8	62.6	54.7	52.5	96.4	151.0	141.7	131.6	125.9	124.4
87.5°	14.4	20.1	20.1	15.1	11.5	26.6	30.2	8.6	0.0	0.7	1.4
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)