

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: P451180

Luminaire Tested: **GALN-SA2A-740-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451180
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-SA2A-740-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9286 lumens
Efficiency: N/A
Efficacy: 147.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

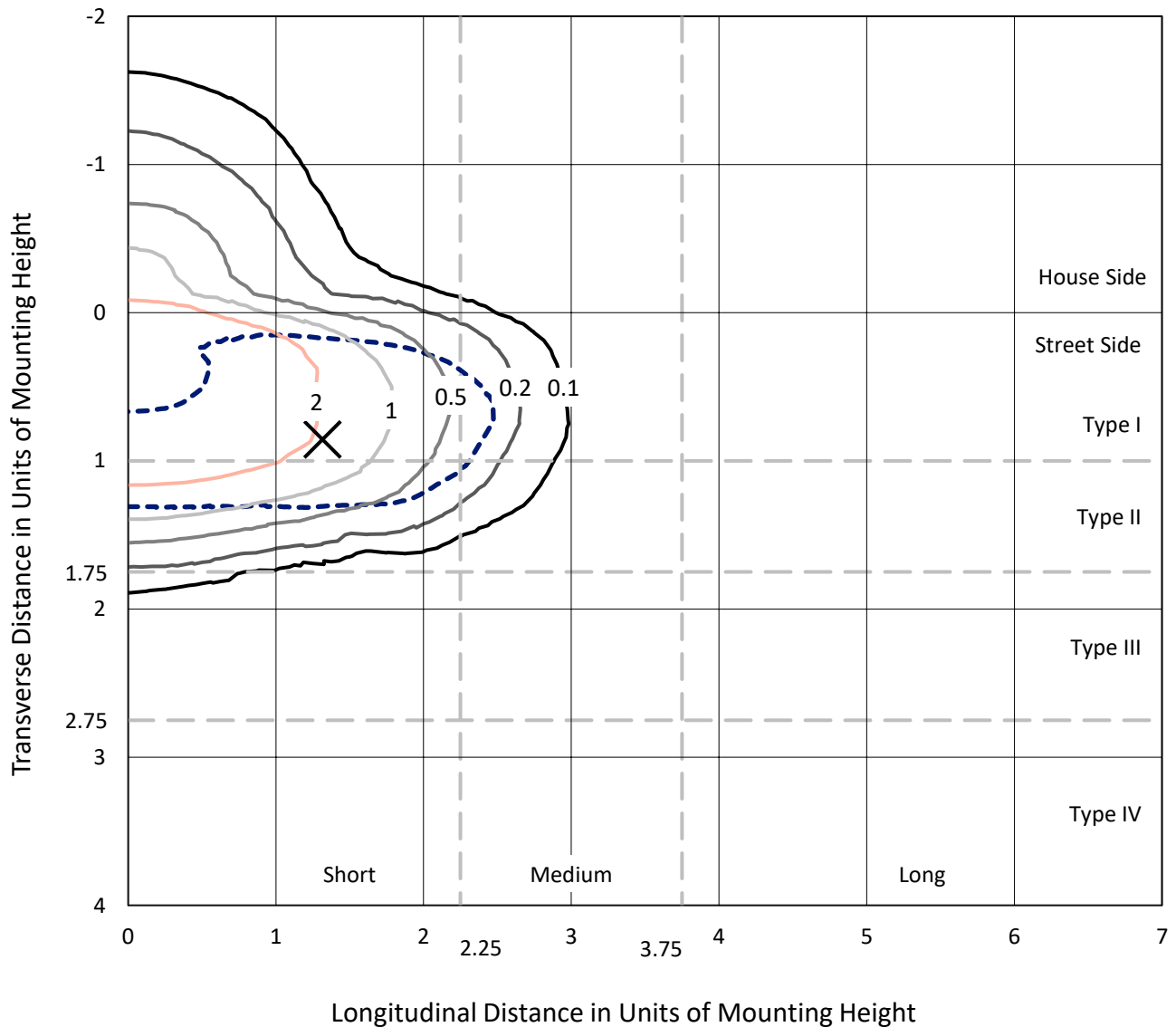
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

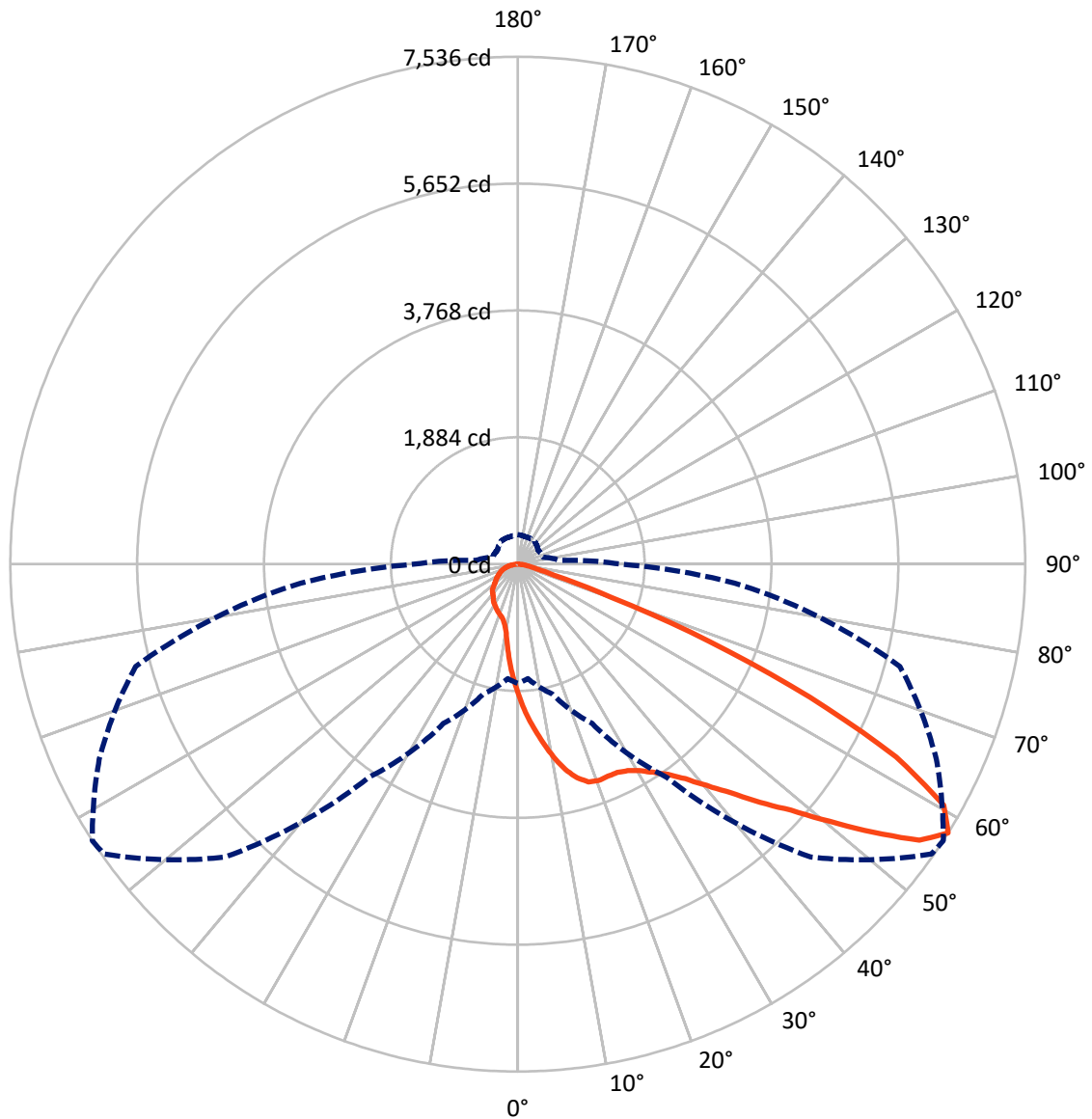
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1412.1	0.0	1412.1
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	7873.9	0.0	7873.9
	% Fixture	84.8	0.0	84.8
Total	Lumens	9286.0	0.0	9286.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.5	2.0
10°-20°	552.6	6.0
20°-30°	917.6	9.9
30°-40°	1382.1	14.9
40°-50°	2075.1	22.3
50°-60°	2325.9	25.0
60°-70°	1361.2	14.7
70°-80°	402.6	4.3
80°-90°	81.4	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°	9286.0	100.0
0°-180°	9286.0	100.0

Coefficient of Utilization



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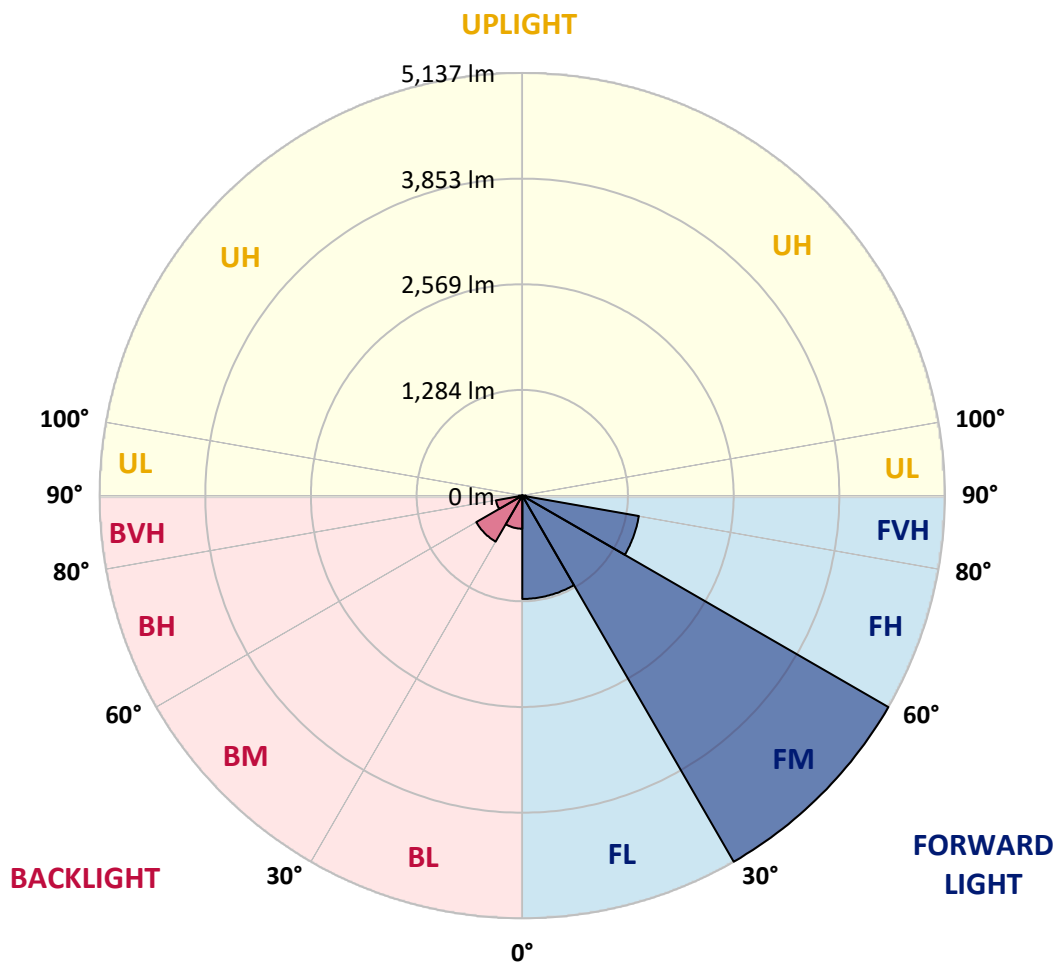
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1255.3	13.5			
FM	(30°-60°)	5137.4	55.3			
FH	(60°-80°)	1439.0	15.5			G1/1800
FVH	(80°-90°)	42.2	0.5			G1/100
BL	(0°-30°)	402.4	4.3	B1/500		
BM	(30°-60°)	645.7	7.0	B1/1000		
BH	(60°-80°)	324.9	3.5	B1/500		G1/500
BVH	(80°-90°)	39.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	2424.1	2397.7	2376.8	2358.5	2334.7	2270.1	2205.5	2204.5	2153.2	2073.9	1992.6
5°	2819.1	2783.5	2788.1	2731.1	2674.2	2580.7	2443.9	2436.8	2327.5	2179.1	2028.1
7.5°	3076.3	3076.8	3062.5	3030.0	2968.5	2862.3	2707.2	2672.2	2520.2	2295.0	2068.8
10°	3063.1	3076.8	3100.7	3128.6	3147.4	3095.1	2953.8	2911.1	2713.3	2435.3	2114.0
12.5°	2887.2	2908.5	2942.6	3012.7	3126.1	3212.5	3164.2	3129.6	2937.0	2575.1	2163.9
15°	2777.4	2790.1	2808.9	2856.2	2978.2	3185.1	3310.1	3291.8	3147.9	2733.2	2219.8
17.5°	2743.8	2756.5	2762.6	2791.6	2878.5	3090.5	3367.5	3400.1	3335.0	2878.5	2276.2
20°	2777.4	2783.5	2783.5	2800.8	2868.9	3035.1	3365.0	3430.6	3488.5	3052.9	2329.1
22.5°	2865.3	2867.9	2864.3	2870.4	2921.2	3050.4	3341.1	3422.4	3612.5	3200.8	2370.2
25°	3008.2	3012.2	2988.8	2974.6	3011.7	3117.4	3354.3	3429.0	3709.6	3342.1	2397.7
27.5°	3170.3	3175.4	3146.9	3113.9	3131.2	3200.3	3406.2	3473.3	3782.3	3481.4	2415.0
30°	3369.1	3371.1	3323.3	3283.7	3272.5	3323.8	3494.6	3557.1	3872.8	3645.6	2440.9
32.5°	3572.4	3587.6	3526.1	3470.2	3451.4	3467.2	3625.2	3685.7	3980.6	3822.0	2482.6
35°	3848.9	3851.4	3777.7	3709.6	3647.6	3667.9	3792.5	3836.2	4129.5	4025.8	2541.5
37.5°	4194.0	4217.4	4115.8	3988.7	3912.4	3883.0	3994.8	4042.6	4338.4	4275.9	2630.5
40°	4577.3	4585.9	4499.0	4419.7	4280.5	4195.1	4272.3	4324.2	4596.1	4574.3	2733.7
42.5°	4818.2	4837.0	4843.7	4835.5	4730.8	4587.5	4617.0	4641.4	4901.1	4854.3	2839.4
45°	4899.6	4927.5	5022.1	5222.3	5233.5	5092.2	5023.6	5047.0	5233.5	5137.0	2940.6
47.5°	4764.9	4812.7	4987.0	5397.7	5705.2	5715.9	5509.0	5457.7	5536.5	5371.3	3013.8
50°	4416.7	4426.8	4693.7	5288.4	5926.4	6312.2	6098.2	6002.6	5824.2	5544.6	3064.1
52.5°	3877.9	3889.6	4113.2	4780.6	5790.1	6729.0	6787.4	6616.6	6116.5	5679.3	3097.1
55°	2878.5	2946.1	3192.2	3837.2	5144.6	6689.8	7335.4	7238.3	6469.7	5786.1	3149.0
57.5°	1769.9	1707.9	1999.7	2610.7	3869.2	6152.0	7504.6	7536.2	6858.6	5875.5	3235.9
60°	814.3	826.5	947.0	1346.5	2358.5	4812.7	7068.5	7267.8	7073.6	5872.5	3257.7
62.5°	561.2	550.0	519.5	591.2	1075.6	3043.7	5970.6	6308.1	6642.6	5690.0	3170.8
65°	501.7	490.5	431.6	411.7	494.1	1326.7	4340.4	4766.4	5592.9	5229.5	2954.3
67.5°	468.7	453.4	392.4	353.8	352.8	528.1	2559.3	3072.2	4148.3	4421.3	2559.8
70°	434.1	421.9	361.4	318.7	300.4	331.9	1124.9	1472.6	2693.5	3186.1	1994.1
72.5°	399.5	385.3	330.9	285.2	261.3	248.6	431.0	560.7	1521.9	1910.2	1222.5
75°	349.2	342.1	295.8	258.2	232.3	200.8	273.5	312.1	727.9	877.3	613.5
77.5°	305.5	297.9	262.8	225.7	206.9	163.2	194.2	212.0	307.0	355.8	277.0
80°	223.7	231.3	221.6	199.3	184.5	128.1	130.6	145.4	182.5	201.8	169.3
82.5°	141.8	156.1	170.8	153.5	139.8	101.2	90.5	96.1	124.5	132.2	75.2
85°	59.5	60.5	99.1	93.5	79.8	60.0	54.4	57.4	66.6	69.6	35.1
87.5°	22.9	22.4	35.1	32.5	24.9	17.3	17.3	19.3	26.4	24.4	11.2
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°	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1957.5	1921.4	1849.7	1760.8	1695.7	1622.5	1558.0	1511.7	1494.4	1486.3	1471.0
5°	1956.0	1884.8	1736.4	1580.8	1455.8	1327.7	1219.4	1149.3	1143.2	1096.4	1091.8
7.5°	1956.5	1847.7	1611.3	1382.6	1192.0	1060.8	971.4	948.0	920.0	912.9	916.5
10°	1958.0	1800.4	1477.1	1186.4	1001.9	916.0	882.4	873.3	874.3	877.3	877.8
12.5°	1960.0	1754.7	1337.9	1037.5	895.1	859.5	856.0	864.1	872.8	879.4	880.9
15°	1962.6	1702.3	1202.1	917.5	841.8	838.7	850.4	864.1	876.3	886.0	887.5
17.5°	1959.5	1641.3	1088.3	843.8	812.3	827.0	846.3	863.6	874.8	883.9	885.0
20°	1952.4	1573.2	978.5	791.9	794.0	817.9	838.7	855.0	867.2	871.7	875.3
22.5°	1925.0	1491.9	882.9	751.8	772.1	805.2	830.1	839.7	826.0	816.3	818.9
25°	1878.2	1386.2	794.0	719.3	752.3	787.4	812.8	789.4	778.2	774.2	776.2
27.5°	1819.7	1270.3	726.9	685.2	726.9	767.5	760.4	756.4	751.3	744.7	746.2
30°	1756.7	1156.9	669.9	658.8	699.4	722.8	725.9	732.5	726.9	716.7	720.8
32.5°	1698.3	1050.2	626.7	636.4	680.1	676.6	699.4	707.1	681.1	647.1	648.6
35°	1648.4	951.0	594.2	614.5	647.1	648.6	671.5	645.0	617.1	600.8	601.8
37.5°	1610.8	873.8	572.9	595.7	604.9	624.2	612.0	598.3	594.7	583.5	584.0
40°	1588.5	806.2	559.1	581.0	579.5	592.7	553.5	567.3	572.4	568.8	569.3
42.5°	1566.1	758.4	544.9	560.7	560.2	534.2	525.6	537.3	550.5	552.0	551.0
45°	1548.3	721.3	530.2	529.7	539.8	499.2	496.6	503.7	522.5	531.7	531.2
47.5°	1528.5	690.3	507.8	493.6	496.6	477.3	473.2	476.3	499.2	513.9	518.0
50°	1503.6	659.3	479.8	460.5	447.8	457.0	458.0	458.5	481.4	498.1	501.7
52.5°	1483.7	635.9	447.8	433.6	418.3	438.7	446.3	447.3	461.0	474.8	477.3
55°	1495.4	622.7	416.3	406.1	392.4	419.9	434.6	436.6	439.7	449.9	451.4
57.5°	1530.5	625.7	390.9	377.7	367.5	397.5	422.4	423.9	421.9	434.1	436.1
60°	1541.2	624.2	372.1	346.2	340.1	373.6	404.6	407.7	407.2	424.9	428.5
62.5°	1496.5	604.9	353.3	319.7	315.7	349.2	379.7	391.9	394.4	419.9	424.4
65°	1391.2	565.2	328.4	291.8	291.8	323.3	355.8	372.6	379.7	413.8	418.8
67.5°	1252.5	518.5	303.0	267.9	266.9	298.4	330.4	347.7	358.9	405.1	408.2
70°	1039.5	455.4	271.4	242.0	242.0	270.4	299.4	320.2	336.5	388.9	388.9
72.5°	712.1	378.7	233.3	212.5	213.0	239.4	268.9	292.3	311.6	356.3	357.3
75°	450.4	295.8	191.6	181.0	183.0	207.9	238.4	262.8	301.4	352.3	353.8
77.5°	239.4	207.9	152.5	150.0	152.5	175.4	209.4	243.0	302.4	305.5	300.4
80°	155.0	147.4	120.5	115.4	116.4	141.3	186.5	230.8	243.0	246.0	234.8
82.5°	84.4	93.5	85.4	80.3	80.3	110.3	159.1	183.5	174.3	144.9	138.3
85°	36.1	43.7	44.2	38.6	37.1	68.1	106.7	100.1	93.0	89.0	87.9
87.5°	10.2	14.2	14.2	10.7	8.1	18.8	21.3	6.1	0.0	0.5	1.0
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)