

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: P451515

Luminaire Tested: **GALN-SA2B-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451515
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-SA2B-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8573 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

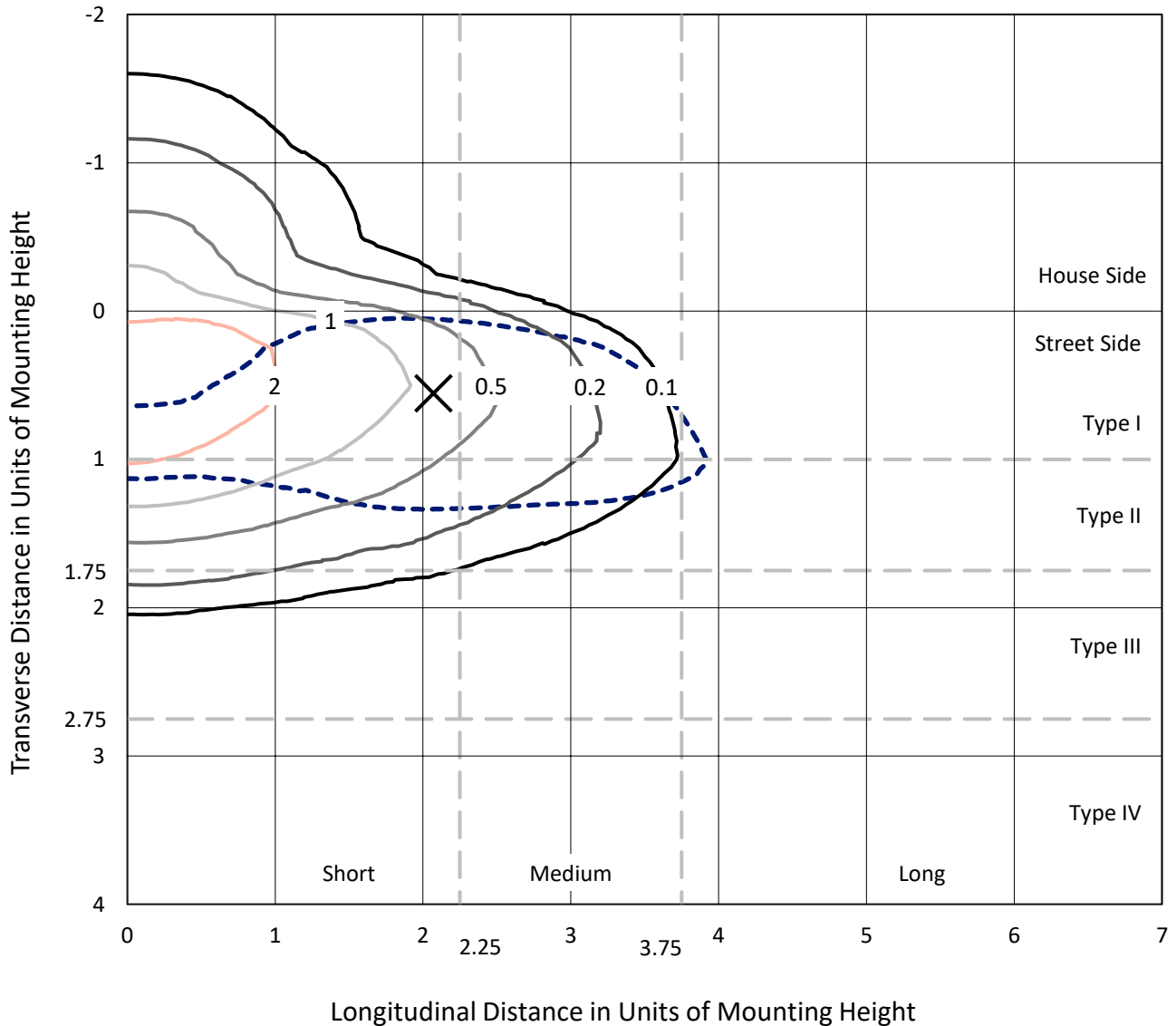
Input Watts (W): 82
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

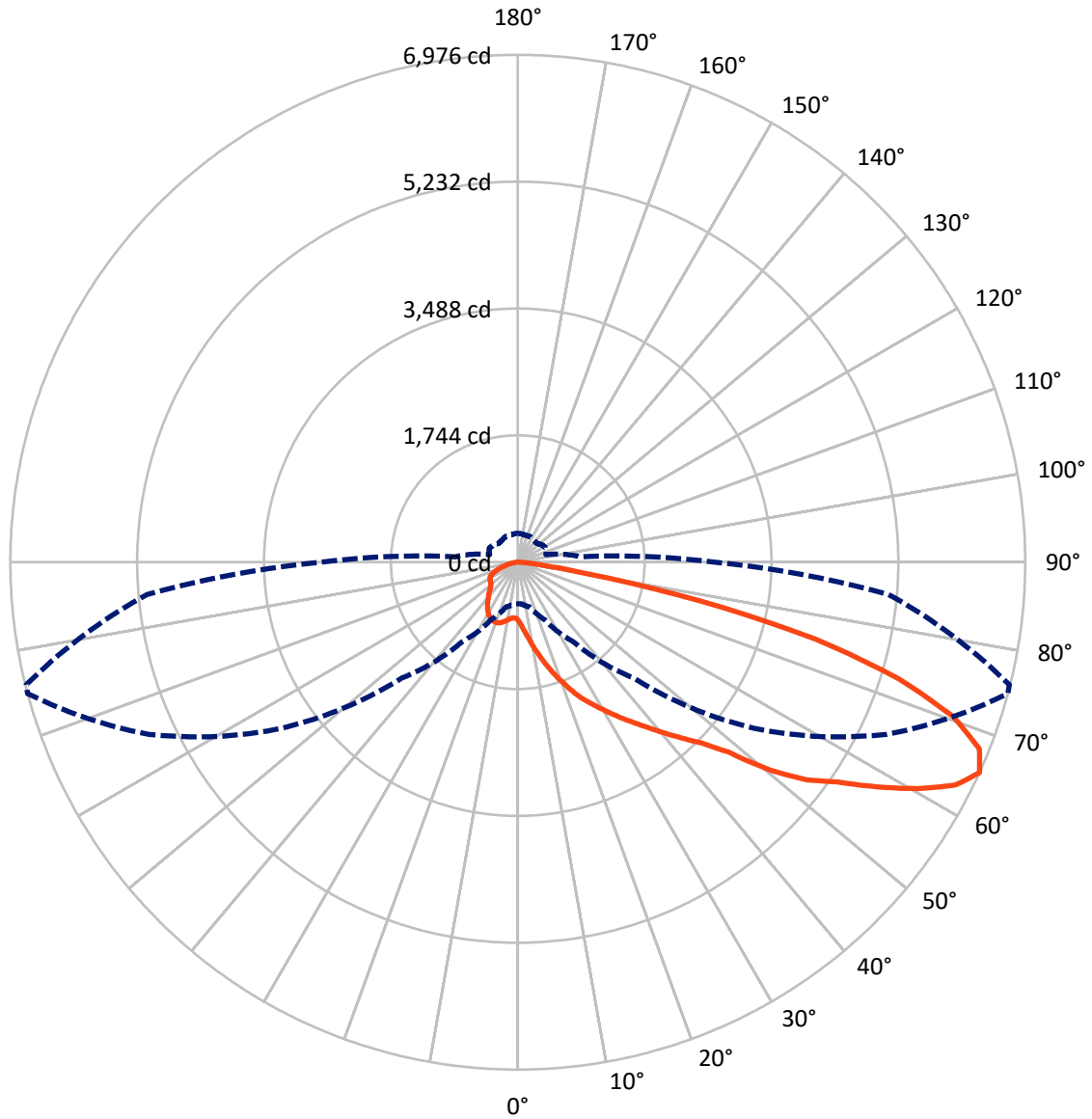
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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
House Side	Lumens	1441.2	0.0	1441.2
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	7131.8	0.0	7131.8
	% Fixture	83.2	0.0	83.2
Total	Lumens	8573.0	0.0	8573.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	1.1
10°-20°	379.1	4.4
20°-30°	732.2	8.5
30°-40°	1189.4	13.9
40°-50°	1636.1	19.1
50°-60°	1931.6	22.5
60°-70°	1692.4	19.7
70°-80°	808.0	9.4
80°-90°	107.5	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°	8573.0	100.0
0°-180°	8573.0	100.0

Coefficient of Utilization



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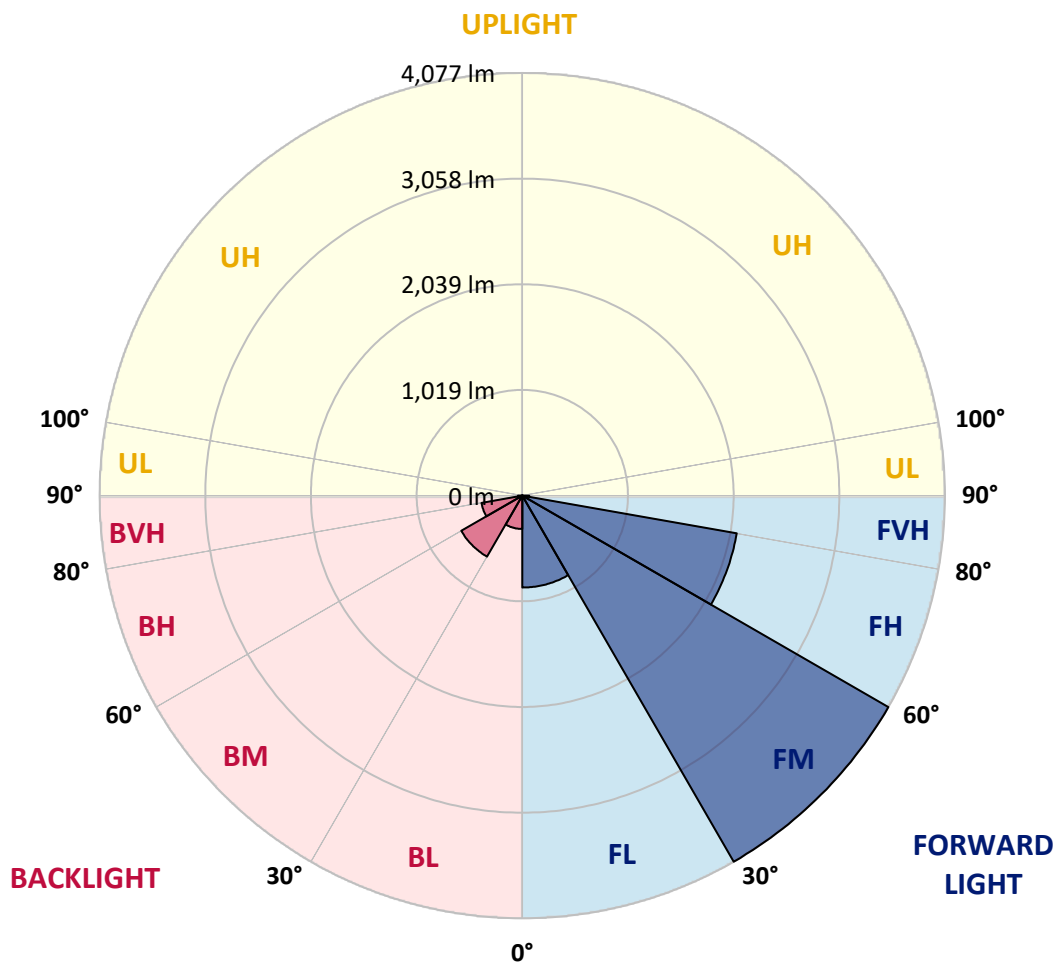
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	886.3	10.3			
FM	(30°-60°)	4077.5	47.6			
FH	(60°-80°)	2100.8	24.5			G2/5000
FVH	(80°-90°)	67.2	0.8			G1/100
BL	(0°-30°)	321.8	3.8	B1/500		
BM	(30°-60°)	679.5	7.9	B1/1000		
BH	(60°-80°)	399.6	4.7	B1/500		G1/500
BVH	(80°-90°)	40.3	0.5			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5
2.5°	1058.3	1051.4	1043.9	1023.5	1001.6	977.0	941.6	907.7	862.6	861.2	827.7
5°	1351.7	1347.1	1314.1	1295.0	1244.3	1176.9	1119.7	1030.9	948.6	938.8	873.7
7.5°	1621.4	1603.3	1590.8	1556.3	1506.1	1419.6	1309.0	1189.0	1051.4	1038.3	930.5
10°	1824.6	1822.8	1816.3	1786.5	1748.9	1662.8	1540.1	1368.0	1181.6	1156.0	999.3
12.5°	1976.7	1978.1	1977.2	1976.7	1949.7	1876.7	1743.7	1562.4	1313.2	1295.0	1078.8
15°	2076.7	2090.6	2096.2	2119.5	2121.8	2073.0	1958.6	1750.2	1461.5	1434.5	1164.4
17.5°	2142.7	2149.7	2175.7	2215.2	2247.3	2238.5	2136.7	1924.2	1613.1	1568.0	1253.2
20°	2205.9	2218.0	2238.0	2292.0	2348.7	2374.7	2303.1	2102.3	1763.3	1734.4	1351.3
22.5°	2337.5	2354.7	2361.7	2389.2	2437.5	2483.5	2451.0	2272.9	1927.9	1888.8	1455.4
25°	2560.3	2578.4	2558.9	2552.4	2568.2	2591.0	2584.0	2433.8	2083.2	2027.4	1554.0
27.5°	2850.4	2852.8	2814.6	2778.4	2739.3	2727.7	2706.3	2576.5	2218.0	2171.5	1653.1
30°	3162.0	3150.8	3087.6	3022.0	2956.0	2890.9	2829.5	2714.2	2368.2	2314.8	1750.2
32.5°	3451.2	3445.2	3374.9	3273.1	3161.5	3100.1	2976.0	2853.2	2529.1	2477.5	1850.2
35°	3667.9	3676.7	3599.5	3488.4	3366.6	3312.2	3155.5	2999.2	2695.6	2639.3	1959.0
37.5°	3821.8	3817.2	3748.8	3652.6	3545.6	3498.2	3365.2	3158.7	2874.6	2820.7	2078.1
40°	3876.7	3873.9	3823.2	3753.0	3685.1	3668.4	3584.7	3330.8	3079.7	3016.4	2221.3
42.5°	3841.8	3847.9	3814.4	3795.3	3782.8	3794.8	3802.7	3556.3	3303.3	3245.2	2376.6
45°	3734.9	3731.6	3727.0	3758.1	3828.8	3908.3	4018.5	3769.3	3546.5	3500.0	2584.9
47.5°	3543.7	3567.0	3578.6	3664.6	3819.0	4007.3	4266.8	4054.8	3899.5	3859.0	2902.5
50°	3276.4	3295.0	3363.8	3516.8	3746.9	4044.5	4509.5	4521.6	4488.2	4412.4	3247.5
52.5°	2858.8	2887.6	3029.5	3309.8	3599.1	4029.2	4656.5	4922.0	4966.2	4909.4	3587.5
55°	2391.5	2431.9	2581.7	2949.5	3395.4	3945.5	4757.9	5154.0	5330.3	5277.7	3914.8
57.5°	1933.9	1976.7	2130.6	2486.8	3040.2	3760.4	4824.3	5412.6	5825.9	5757.6	4322.1
60°	1449.4	1494.0	1626.1	1993.0	2534.2	3398.7	4779.2	5636.7	6321.2	6291.9	4730.0
62.5°	935.1	984.4	1099.3	1402.9	1947.9	2904.4	4537.9	5760.4	6749.9	6714.6	5027.5
65°	569.6	575.2	638.4	870.9	1333.1	2248.7	3986.0	5596.2	6975.9	6965.2	5118.2
67.5°	368.3	377.1	405.9	521.7	799.3	1561.9	3187.1	5054.5	6843.8	6840.1	4930.8
70°	311.1	313.9	326.9	352.0	464.5	947.2	2238.0	4191.0	6342.1	6342.1	4480.2
72.5°	278.1	281.8	286.4	294.3	331.5	536.6	1335.5	3262.4	5475.8	5512.1	3813.4
75°	252.5	251.6	254.4	255.7	282.7	350.6	690.5	2412.9	4236.1	4163.6	2761.6
77.5°	216.2	217.6	216.2	222.3	249.7	266.9	350.6	1619.1	2567.2	2473.3	1386.2
80°	177.6	180.0	182.3	186.0	213.4	202.7	210.6	738.0	949.5	929.5	428.3
82.5°	133.5	136.7	140.4	149.3	167.9	133.9	133.0	315.3	342.7	313.9	157.6
85°	53.9	63.7	96.3	105.1	105.6	73.5	81.8	131.6	140.0	136.7	61.8
87.5°	12.6	14.9	31.2	47.0	43.2	27.4	30.2	42.8	48.8	45.1	20.9
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°	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5	796.5
2.5°	812.3	796.1	768.2	746.8	731.4	718.0	709.6	704.5	702.6	702.1	702.6
5°	839.8	811.0	766.8	738.9	723.5	714.7	709.6	709.1	709.6	710.1	708.7
7.5°	877.4	836.1	778.4	752.4	740.7	734.2	731.9	731.0	731.4	731.0	731.0
10°	927.7	870.9	801.2	774.2	764.5	757.0	753.3	751.0	749.1	747.3	746.3
12.5°	983.0	909.5	825.8	799.8	785.8	774.2	765.9	759.8	755.6	751.4	750.5
15°	1044.8	950.5	853.3	817.0	797.0	779.8	765.4	755.6	748.2	742.1	741.7
17.5°	1103.9	989.0	871.9	824.9	795.6	771.4	752.4	738.9	729.6	721.7	720.7
20°	1167.1	1025.8	880.2	819.8	781.7	752.4	727.3	711.0	700.3	691.5	690.1
22.5°	1230.8	1056.9	879.3	803.5	757.5	723.1	696.6	679.4	666.8	658.0	654.7
25°	1291.8	1082.0	867.7	777.5	724.0	688.2	661.2	645.4	634.3	623.6	623.6
27.5°	1346.6	1096.9	845.8	745.9	689.6	651.9	630.5	616.1	605.9	598.9	594.7
30°	1400.6	1103.9	816.1	705.9	653.3	621.2	604.0	595.7	586.4	578.5	577.5
32.5°	1448.9	1102.5	778.9	666.8	618.9	596.1	589.2	582.6	572.9	561.7	558.9
35°	1495.9	1093.2	734.7	624.0	590.1	581.2	583.1	573.8	556.1	542.2	539.9
37.5°	1547.0	1076.5	686.3	589.2	565.9	574.3	578.9	558.5	529.6	507.8	502.7
40°	1606.1	1057.4	636.1	554.3	546.8	567.8	567.8	530.1	490.6	477.1	473.4
42.5°	1675.4	1041.6	594.3	525.0	531.0	552.0	549.6	492.4	476.2	469.2	467.3
45°	1785.1	1036.0	551.0	499.4	518.0	533.4	514.3	479.4	470.1	464.5	462.7
47.5°	1958.6	1042.5	512.9	480.3	503.1	514.8	474.8	470.6	464.1	456.2	455.2
50°	2119.5	1036.5	485.9	469.6	490.1	492.4	458.5	459.9	456.2	447.3	445.5
52.5°	2251.1	1017.4	468.7	464.1	478.9	453.4	443.1	448.3	446.9	435.7	433.8
55°	2395.7	1005.8	460.3	464.1	471.5	419.4	428.7	436.2	434.3	426.4	425.9
57.5°	2571.0	1008.1	454.3	465.5	464.1	402.2	414.3	423.1	422.7	420.4	420.4
60°	2750.5	1009.0	445.0	465.0	455.2	388.7	399.4	412.0	412.9	414.3	414.3
62.5°	2810.0	968.6	426.9	456.6	435.7	375.7	385.5	402.7	401.8	405.5	405.9
65°	2698.8	856.5	399.9	437.6	410.6	366.4	374.8	390.6	385.5	395.2	397.1
67.5°	2456.6	708.7	358.0	403.2	382.7	356.7	367.8	373.9	364.6	383.6	384.1
70°	2123.2	553.3	305.0	354.3	351.1	346.4	362.2	352.9	339.9	363.2	358.5
72.5°	1775.4	422.7	243.7	289.7	308.8	331.1	352.5	326.0	307.8	314.8	306.4
75°	1333.6	312.5	195.8	226.9	257.1	309.2	343.6	293.4	265.5	259.0	257.1
77.5°	679.8	204.1	146.5	169.7	193.0	279.5	331.5	255.3	219.9	209.7	205.1
80°	242.7	126.9	103.2	117.2	130.2	240.4	289.7	211.1	170.7	168.8	170.7
82.5°	112.5	81.8	69.3	76.7	77.2	160.4	220.9	157.6	129.7	197.2	166.5
85°	48.4	40.9	39.1	38.1	35.3	71.6	124.2	84.6	132.1	59.1	54.4
87.5°	14.4	16.3	14.4	10.7	7.9	7.9	12.6	4.6	3.3	2.3	2.3
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)