

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: P454066

Luminaire Tested: **GALN-SA5A-827-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13479 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

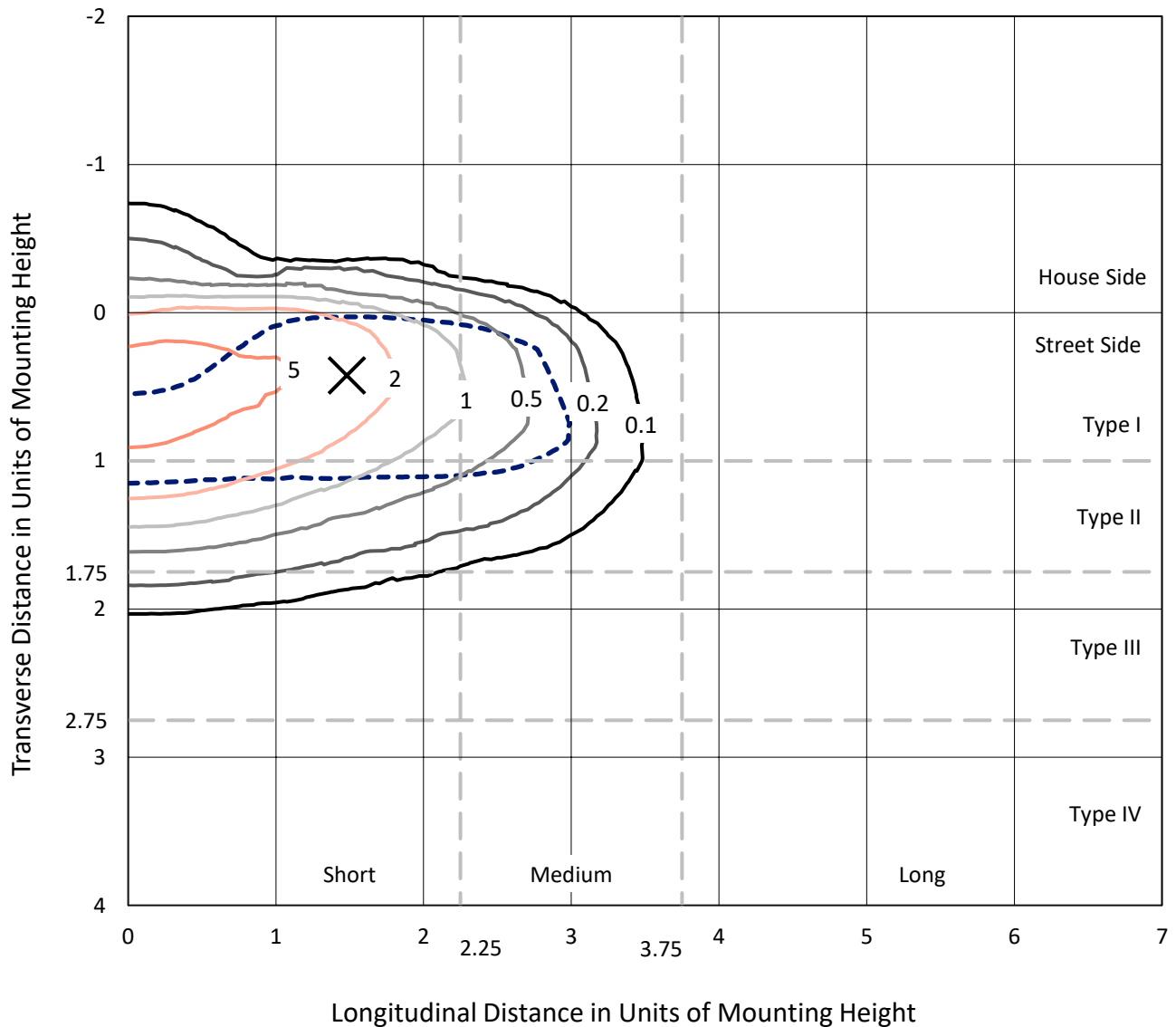
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

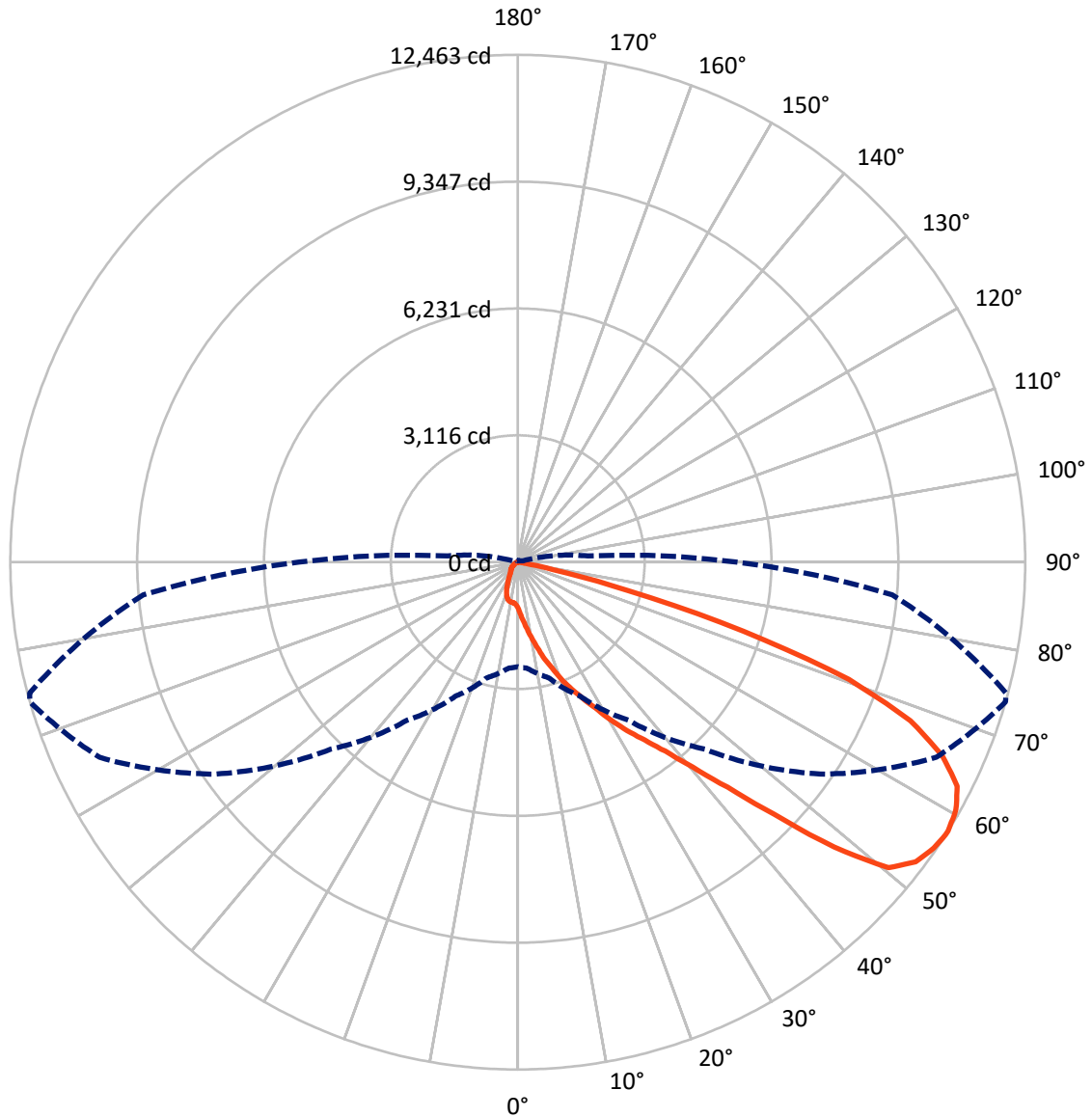
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	777.4	0.0	777.4
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	12701.6	0.0	12701.6
	% Fixture	94.2	0.0	94.2
Total	Lumens	13479.0	0.0	13479.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	1.0
10°-20°	537.1	4.0
20°-30°	1149.2	8.5
30°-40°	2112.2	15.7
40°-50°	3238.0	24.0
50°-60°	3425.4	25.4
60°-70°	2236.9	16.6
70°-80°	611.2	4.5
80°-90°	32.9	0.2
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°	13479.0	100.0
0°-180°	13479.0	100.0

Coefficient of Utilization



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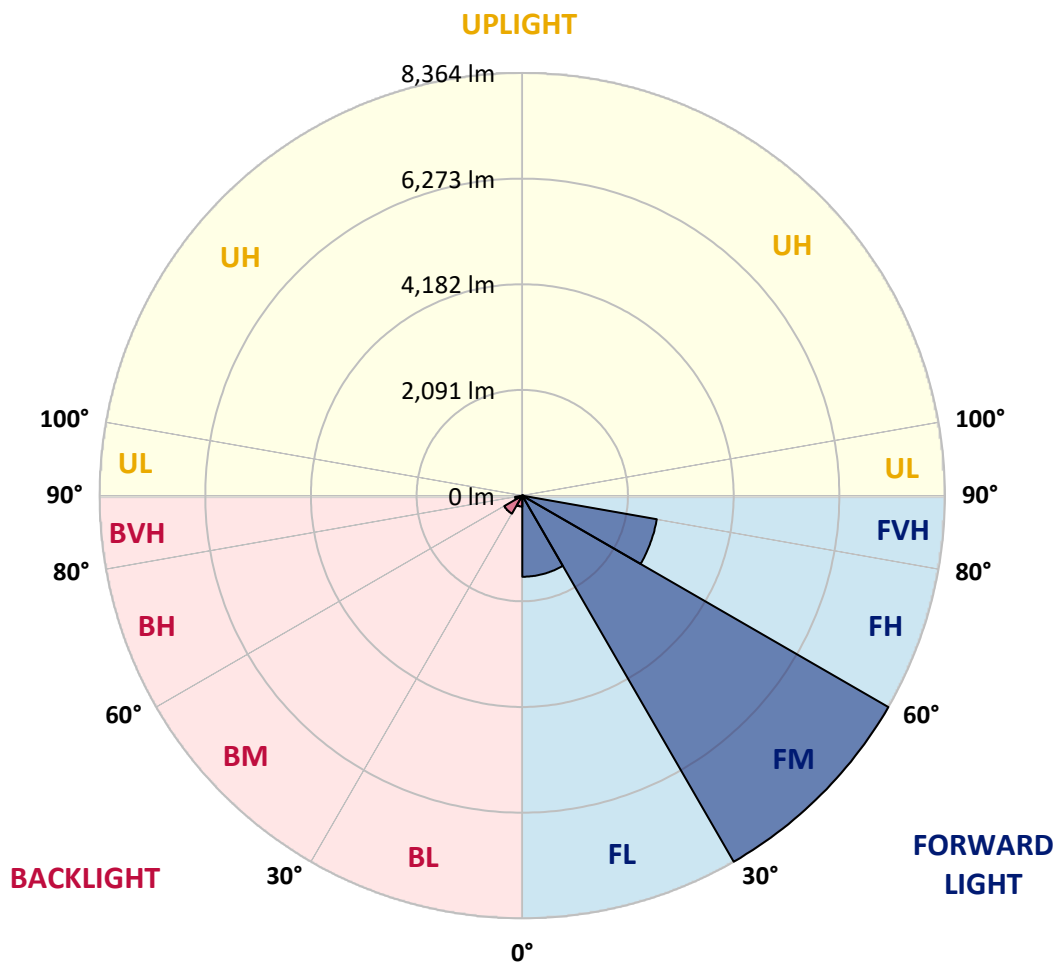
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1605.3	11.9			
FM (30°-60°)	8364.0	62.1			
FH (60°-80°)	2702.1	20.0			G2/5000
FVH (80°-90°)	30.2	0.2			G1/100
BL (0°-30°)	217.2	1.6	B1/500		
BM (30°-60°)	411.6	3.1	B1/1000		
BH (60°-80°)	146.0	1.1	B1/500		G1/500
BVH (80°-90°)	2.7	0.0			G0/10
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°	74°	75°	85°
0°	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8
2.5°	1651.9	1637.0	1607.2	1597.0	1553.2	1485.3	1425.7	1345.7	1282.4	1275.9	1199.6
5°	2212.1	2178.6	2164.6	2097.6	1992.5	1893.8	1724.4	1596.0	1448.1	1436.9	1283.3
7.5°	2751.9	2705.3	2691.4	2628.1	2505.2	2349.8	2130.2	1896.6	1662.1	1640.7	1395.9
10°	3142.7	3149.2	3124.1	3082.2	2982.7	2824.4	2553.6	2234.4	1900.3	1873.3	1522.5
12.5°	3422.8	3421.9	3426.6	3425.6	3372.6	3252.5	2967.8	2600.2	2162.8	2109.7	1667.7
15°	3605.2	3608.0	3622.0	3670.4	3676.0	3601.5	3364.2	2950.1	2467.1	2401.0	1825.0
17.5°	3789.5	3809.1	3831.4	3877.0	3917.9	3888.2	3720.6	3314.9	2742.6	2693.2	1993.4
20°	4093.8	4120.8	4107.8	4135.7	4157.1	4159.9	4030.5	3651.8	3076.6	2993.8	2186.0
22.5°	4580.5	4579.6	4546.1	4495.9	4454.0	4452.1	4334.9	3998.0	3380.0	3300.0	2379.6
25°	5195.7	5198.5	5133.3	4990.0	4885.8	4758.3	4623.3	4301.4	3704.8	3606.2	2583.4
27.5°	5901.1	5883.4	5784.8	5587.5	5380.9	5163.1	4968.6	4654.1	4049.2	3967.3	2817.0
30°	6534.9	6528.3	6412.9	6171.9	5900.2	5681.5	5399.5	5096.1	4494.9	4394.4	3078.5
32.5°	7124.9	7134.2	6974.1	6724.7	6462.3	6210.1	5912.3	5518.6	4932.3	4789.9	3363.3
35°	7585.5	7594.8	7429.2	7221.7	6951.8	6742.4	6458.5	5969.0	5364.1	5244.1	3690.9
37.5°	7831.2	7843.3	7747.5	7591.1	7422.7	7317.5	7053.2	6548.8	5889.0	5816.4	4078.0
40°	7877.7	7891.7	7849.8	7807.9	7798.6	7874.0	7796.8	7231.9	6616.7	6503.2	4655.0
42.5°	7738.2	7756.8	7775.4	7868.4	8058.3	8334.7	8603.6	8158.8	7553.9	7401.3	5360.4
45°	7371.5	7369.6	7443.1	7684.2	8109.5	8699.5	9446.8	9319.3	8830.7	8649.2	6357.1
47.5°	6744.2	6734.9	6894.1	7237.5	7900.1	8766.5	10134.5	10728.3	10460.2	10292.7	7428.3
50°	5788.5	5834.1	6084.4	6563.7	7379.9	8563.6	10346.7	11652.4	11797.5	11619.8	8293.7
52.5°	4668.9	4667.1	5059.8	5710.3	6609.3	8116.9	10198.7	11819.9	12232.1	12096.3	8720.0
55°	3455.4	3479.6	3888.2	4544.2	5608.9	7301.7	9715.7	11647.7	12397.8	12301.9	9001.0
57°	2570.4	2613.2	2940.8	3635.0	4737.8	6494.8	9072.7	11339.7	12462.9	12410.8	9234.6
57.5°	2399.2	2401.0	2720.2	3351.2	4482.8	6184.9	8888.4	11211.2	12461.1	12432.2	9272.8
60°	1476.9	1523.4	1744.0	2265.1	3281.4	4827.2	7653.5	10473.3	12364.3	12406.2	9435.6
62.5°	884.1	903.6	1047.0	1365.2	2115.3	3523.3	6263.1	9528.7	12112.1	12239.6	9424.4
65°	568.6	573.3	638.4	826.4	1322.4	2381.5	4826.2	8280.7	11459.7	11694.2	9055.9
67.5°	439.3	446.7	472.8	542.6	766.8	1483.4	3413.5	6949.0	10404.4	10706.8	8162.5
70°	389.9	393.7	403.0	425.3	507.2	837.6	2123.7	5428.3	8627.8	8713.4	6387.8
72.5°	318.3	328.5	357.4	364.8	402.0	523.0	1181.9	3643.4	5796.9	5818.3	3573.6
75°	246.6	248.5	291.3	312.7	338.7	360.2	527.7	1837.1	2784.4	2635.5	1377.3
77.5°	184.3	192.6	212.2	239.2	276.4	257.8	236.4	692.4	864.6	848.7	400.2
80°	118.2	122.8	148.0	179.6	215.0	168.4	133.1	202.9	189.8	195.4	95.9
82.5°	59.6	60.5	94.9	146.1	136.8	84.7	83.8	82.8	70.7	69.8	44.7
85°	6.5	14.0	61.4	83.8	61.4	27.9	39.1	38.2	37.2	38.2	26.1
87.5°	0.9	0.9	10.2	12.1	8.4	9.3	11.2	12.1	14.9	14.0	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°	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8	1128.8
2.5°	1162.4	1125.1	1056.3	990.2	940.9	909.2	868.3	853.4	832.0	829.2	819.0
5°	1212.6	1141.9	1021.8	926.9	850.6	792.9	742.6	700.8	667.3	659.8	663.5
7.5°	1284.3	1179.1	1011.6	882.2	776.1	677.5	597.5	548.1	512.8	499.7	501.6
10°	1365.2	1228.4	1009.7	834.8	672.8	551.9	464.4	420.6	400.2	392.7	384.3
12.5°	1461.1	1285.2	1005.1	761.3	559.3	440.2	377.8	351.8	332.2	326.6	326.6
15°	1569.0	1345.7	982.7	670.1	454.1	363.9	322.0	301.5	295.0	289.4	289.4
17.5°	1681.6	1405.2	936.2	557.4	376.9	311.8	285.7	273.6	264.3	257.8	257.8
20°	1810.1	1463.9	861.8	457.9	318.3	278.3	257.8	243.8	236.4	230.8	228.9
22.5°	1932.0	1511.3	766.8	376.0	277.3	250.3	231.7	216.8	209.4	206.6	206.6
25°	2058.5	1540.2	652.4	310.8	253.1	227.1	206.6	194.5	188.0	186.1	185.2
27.5°	2181.4	1556.9	551.9	271.7	230.8	205.7	186.1	176.8	170.3	168.4	169.4
30°	2330.3	1559.7	454.1	243.8	211.3	185.2	167.5	159.1	155.4	153.6	152.6
32.5°	2481.0	1556.0	381.6	227.1	192.6	167.5	152.6	146.1	143.3	140.5	140.5
35°	2650.4	1536.5	324.8	210.3	175.0	152.6	139.6	134.0	130.3	127.5	126.6
37.5°	2860.7	1526.2	292.2	191.7	159.1	138.7	126.6	121.0	118.2	114.5	113.5
40°	3192.0	1571.8	282.0	175.0	143.3	125.6	114.5	108.0	104.2	100.5	99.6
42.5°	3605.2	1651.9	265.2	158.2	129.4	113.5	102.4	94.9	88.4	83.8	81.9
45°	4140.4	1757.0	239.2	140.5	117.3	100.5	90.3	81.0	72.6	68.9	67.9
47.5°	4701.5	1858.5	215.9	126.6	104.2	89.3	78.2	67.9	60.5	57.7	56.8
50°	5045.9	1878.9	201.0	110.7	91.2	77.2	66.1	56.8	52.1	49.3	49.3
52.5°	5203.1	1846.4	180.5	96.8	79.1	67.9	56.8	49.3	46.5	44.7	43.7
55°	5312.9	1796.1	153.6	83.8	67.9	57.7	50.3	44.7	40.9	39.1	38.2
57°	5377.2	1728.2	133.1	73.5	58.6	50.3	44.7	40.0	36.3	32.6	32.6
57.5°	5379.9	1702.1	127.5	72.6	55.8	48.4	43.7	39.1	34.4	30.7	29.8
60°	5297.1	1523.4	102.4	61.4	44.7	40.9	36.3	30.7	24.2	20.5	19.5
62.5°	5031.0	1296.4	84.7	52.1	36.3	31.6	26.1	23.3	16.8	12.1	12.1
65°	4628.0	1051.6	72.6	41.9	29.8	23.3	17.7	16.8	10.2	5.6	4.7
67.5°	4045.4	819.0	61.4	34.4	25.1	16.8	12.1	11.2	5.6	1.9	0.0
70°	3082.2	558.4	51.2	27.9	18.6	12.1	8.4	6.5	3.7	0.9	0.0
72.5°	1776.6	307.1	42.8	21.4	14.0	9.3	6.5	3.7	3.7	0.0	0.0
75°	634.7	132.1	32.6	15.8	11.2	7.4	4.7	1.9	2.8	0.9	0.0
77.5°	201.9	70.7	21.4	12.1	9.3	5.6	3.7	1.9	1.9	0.9	0.0
80°	59.6	37.2	13.0	10.2	6.5	4.7	2.8	0.9	1.9	0.9	0.0
82.5°	32.6	18.6	10.2	7.4	6.5	3.7	2.8	0.9	0.9	0.9	0.0
85°	16.8	11.2	8.4	7.4	6.5	3.7	2.8	0.9	0.0	0.9	0.9
87.5°	9.3	8.4	8.4	7.4	6.5	4.7	2.8	0.9	0.0	0.0	0.0
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)