

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: P453594

Luminaire Tested: **GALN-SA4C-827-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4C-827-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20012 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

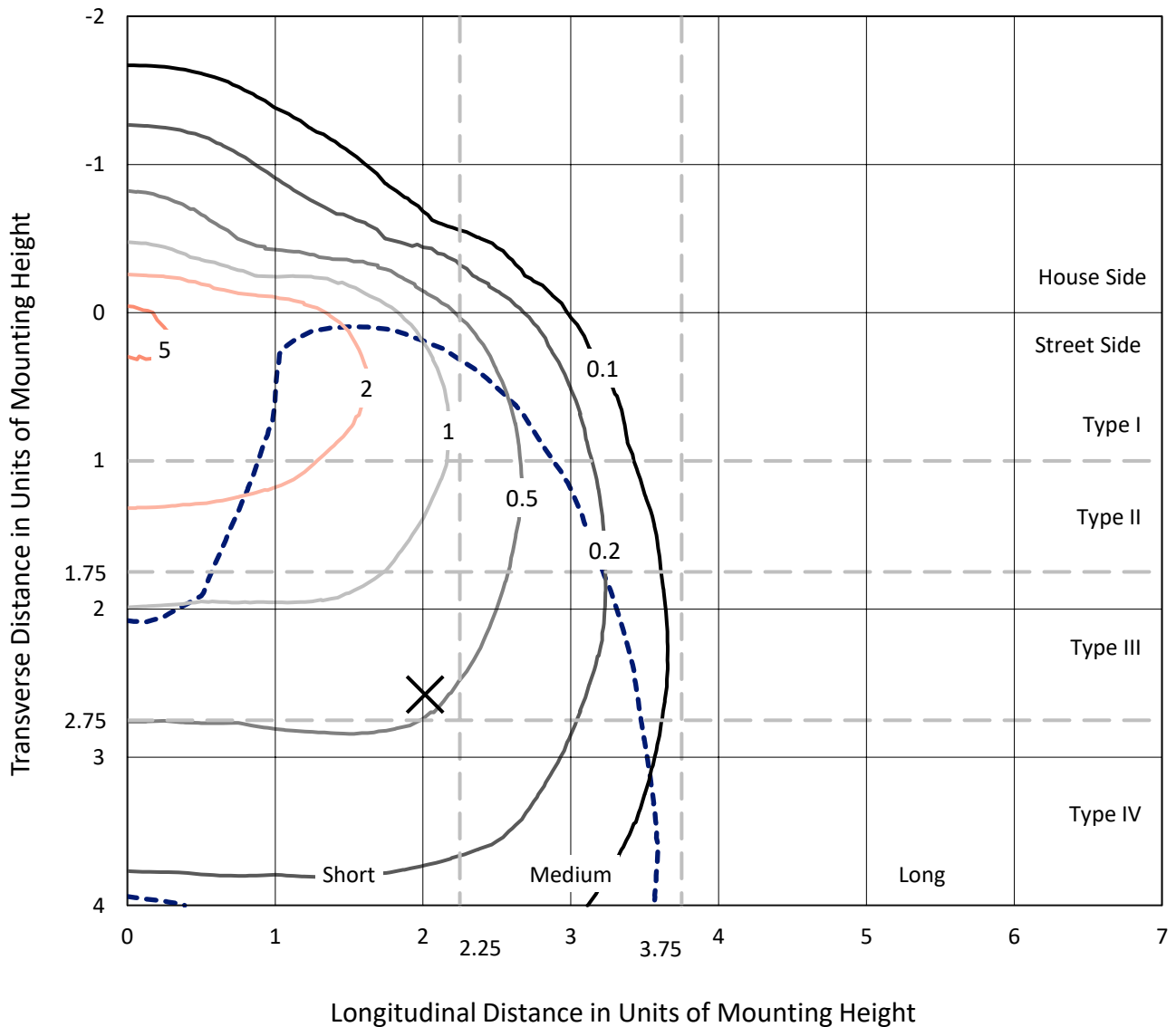
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453594
 CATALOG NUMBER: GALN-SA4C-827-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

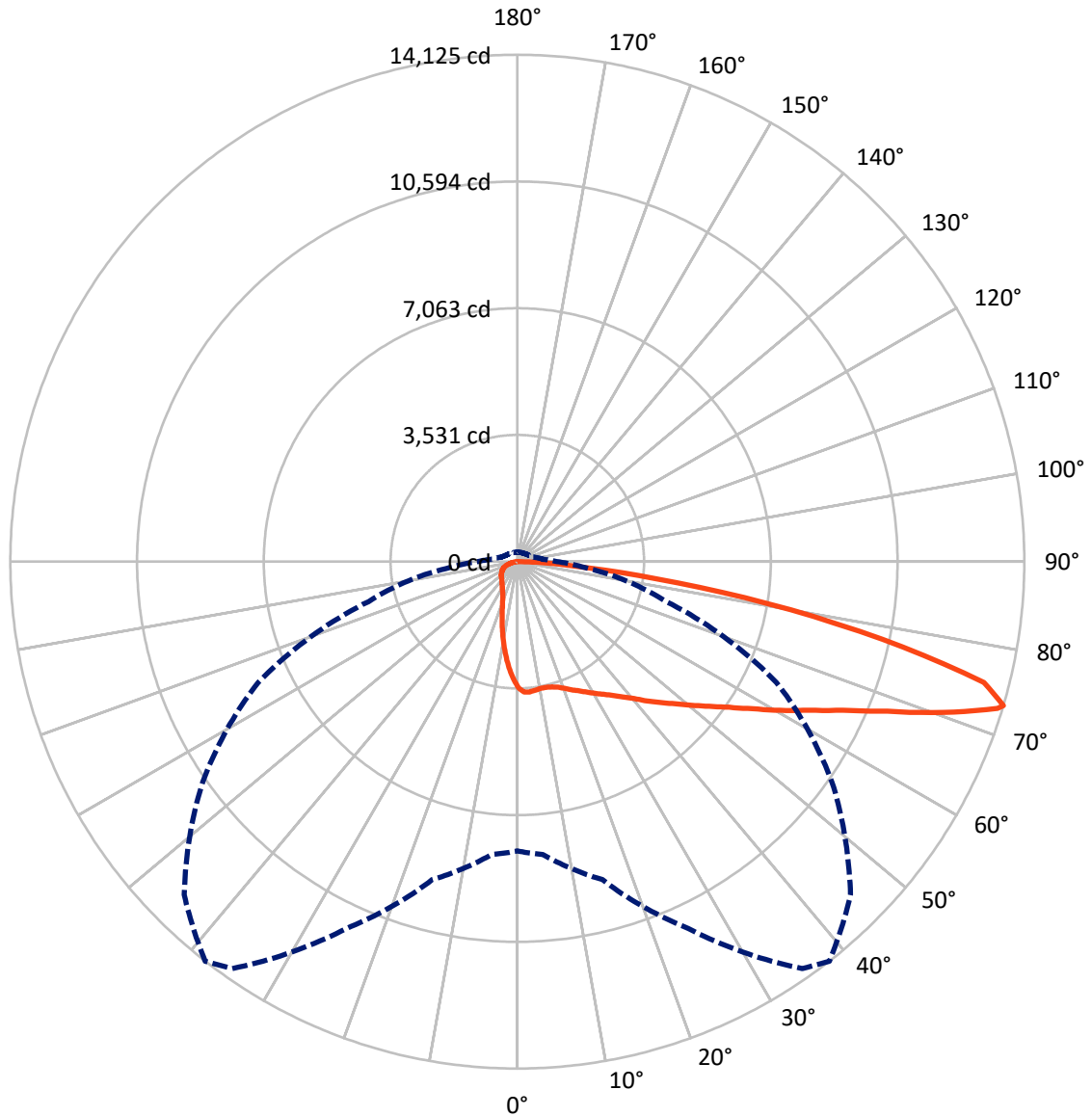
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P453594
CATALOG NUMBER: GALN-SA4C-827-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P453594

CATALOG NUMBER: GALN-SA4C-827-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2690.2	0.0	2690.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	17321.8	0.0	17321.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	20012.0	0.0	20012.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.9	1.5
10°-20°	787.0	3.9
20°-30°	1225.5	6.1
30°-40°	1797.5	9.0
40°-50°	2666.3	13.3
50°-60°	3777.6	18.9
60°-70°	4792.1	23.9
70°-80°	3989.0	19.9
80°-90°	670.2	3.3
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°	20012.0	100.0
0°-180°	20012.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453594

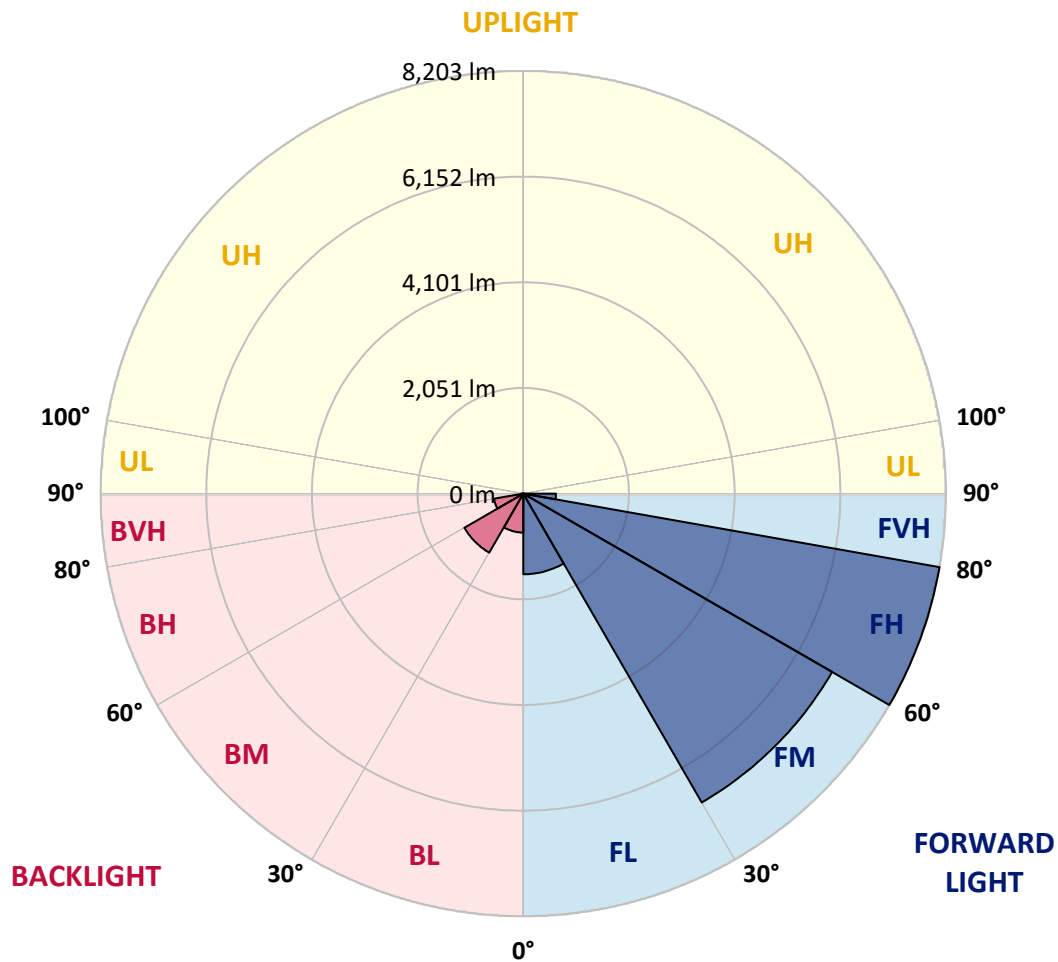
CATALOG NUMBER: GALN-SA4C-827-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1564.4	7.8			
FM (30°-60°)	6920.7	34.6			
FH (60°-80°)	8202.8	41.0			G4/12000
FVH (80°-90°)	633.9	3.2			G4/750
BL (0°-30°)	754.9	3.8	B2/1000		
BM (30°-60°)	1320.7	6.6	B2/2500		
BH (60°-80°)	578.2	2.9	B2/1000		G2/1000
BVH (80°-90°)	36.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P453594

CATALOG NUMBER: GALN-SA4C-827-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8
2.5°	3657.0	3675.1	3666.1	3653.6	3645.7	3637.8	3626.5	3593.7	3567.8	3539.5	3495.4
5°	3684.2	3695.5	3687.5	3671.7	3653.6	3645.7	3624.3	3581.3	3539.5	3492.0	3426.5
7.5°	3668.3	3672.9	3663.8	3644.6	3628.8	3614.1	3589.2	3541.8	3490.9	3433.3	3347.4
10°	3611.8	3628.8	3628.8	3613.0	3597.1	3589.2	3564.4	3519.2	3472.8	3407.3	3305.6
12.5°	3565.5	3583.6	3598.3	3593.7	3592.6	3592.6	3573.4	3539.5	3485.3	3423.1	3302.2
15°	3533.9	3555.3	3587.0	3605.0	3616.3	3619.7	3611.8	3582.4	3527.1	3454.7	3315.7
17.5°	3527.1	3553.1	3610.7	3650.3	3679.6	3678.5	3676.2	3635.6	3574.5	3499.9	3332.7
20°	3557.6	3591.5	3671.7	3733.9	3776.8	3768.9	3756.5	3703.4	3632.2	3548.5	3348.5
22.5°	3649.1	3684.2	3772.3	3840.1	3881.9	3881.9	3844.6	3774.6	3698.8	3605.0	3370.0
25°	3780.2	3818.6	3912.4	3981.4	4000.6	3985.9	3948.6	3863.8	3776.8	3686.4	3415.2
27.5°	3940.7	3987.0	4074.0	4131.7	4126.0	4114.7	4076.3	3967.8	3880.8	3798.3	3492.0
30°	4140.7	4174.6	4265.0	4278.6	4258.3	4256.0	4201.7	4093.3	4011.9	3948.6	3601.7
32.5°	4329.4	4360.0	4432.3	4437.9	4401.8	4406.3	4355.4	4256.0	4209.7	4187.1	3785.9
35°	4529.5	4545.3	4607.5	4600.7	4576.9	4573.6	4553.2	4458.3	4473.0	4513.7	4046.9
37.5°	4696.7	4728.4	4763.4	4769.1	4767.9	4779.2	4792.8	4747.6	4832.3	4960.0	4389.3
40°	4850.4	4877.6	4929.5	4947.6	4991.7	5014.3	5060.6	5061.8	5257.3	5467.5	4810.9
42.5°	4954.4	5000.7	5097.9	5130.7	5238.1	5305.9	5374.8	5448.3	5731.9	6002.0	5308.1
45°	5044.8	5105.8	5267.4	5369.1	5514.9	5597.4	5743.2	5896.9	6304.9	6658.6	5813.3
47.5°	5181.5	5235.8	5421.1	5600.8	5821.2	5916.1	6134.2	6363.6	6897.1	7284.7	6297.0
50°	5371.4	5404.2	5592.9	5885.6	6167.0	6289.1	6577.2	6908.4	7529.9	7902.9	6721.9
52.5°	5614.4	5627.9	5778.2	6168.1	6538.8	6690.2	7072.2	7458.7	8083.7	8439.7	7058.7
55°	5901.4	5878.8	5996.4	6467.6	6963.7	7161.5	7571.7	8015.9	8706.4	8873.6	7303.9
57.5°	6185.1	6150.1	6243.9	6831.5	7488.1	7726.6	8204.6	8590.0	9262.4	9279.3	7475.7
60°	6485.7	6459.7	6571.6	7258.7	8131.1	8413.7	8855.5	9185.5	9800.3	9561.9	7502.8
62.5°	6794.2	6752.4	6911.7	7739.0	8855.5	9112.1	9540.4	9818.4	10328.1	9667.0	7241.7
65°	7093.7	7074.5	7320.8	8309.7	9680.5	9972.1	10388.0	10576.7	10750.7	9508.7	6594.2
67.5°	7412.4	7450.8	7844.1	9071.4	10756.4	11122.5	11571.2	11393.8	10871.6	8759.5	5553.4
70°	7898.3	7923.2	8531.2	10069.3	12143.0	12584.9	12801.9	11684.2	10288.5	7336.7	4174.6
72.5°	8107.4	8217.0	9144.8	11116.9	13718.4	13988.5	13215.5	11036.6	8570.7	4983.8	2193.5
73°	8061.1	8192.2	9173.1	11276.2	13841.6	14125.2	13127.3	10703.3	7967.3	4292.2	1880.5
75°	7483.6	7645.2	8805.8	11142.9	13602.0	13432.5	11710.2	9122.2	5383.8	1951.7	856.6
77.5°	5904.8	5951.2	6977.3	8997.9	10711.2	10397.0	8764.0	5701.4	2199.2	725.5	485.9
80°	2962.0	3132.7	3932.8	5154.4	7162.6	7059.8	5531.9	2696.4	916.5	426.1	322.1
82.5°	1425.1	1546.0	1915.5	2513.4	3957.6	3863.8	2739.4	1473.7	582.0	248.6	189.9
85°	917.6	1008.1	1219.4	1199.0	1627.4	1553.9	1230.7	1115.4	344.7	130.0	132.2
87.5°	605.7	663.4	795.6	636.3	592.2	535.7	543.6	628.3	67.8	49.7	18.1
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: P453594

CATALOG NUMBER: GALN-SA4C-827-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8	3515.8
2.5°	3477.3	3462.7	3414.1	3366.6	3321.4	3278.4	3250.2	3212.9	3188.0	3194.8	3205.0
5°	3390.3	3357.6	3271.7	3188.0	3108.9	3015.1	2939.4	2878.4	2832.1	2815.1	2811.7
7.5°	3298.8	3243.4	3120.2	2976.7	2842.2	2725.8	2591.3	2524.7	2446.7	2419.6	2410.5
10°	3243.4	3168.8	2995.9	2795.9	2593.6	2400.4	2254.6	2135.9	2028.5	2008.2	1998.0
12.5°	3227.6	3129.3	2896.5	2638.8	2369.8	2132.5	1916.7	1760.7	1656.7	1633.0	1598.0
15°	3218.6	3096.5	2803.8	2480.6	2139.3	1850.0	1622.8	1440.9	1346.0	1282.7	1283.8
17.5°	3210.6	3059.2	2699.8	2307.7	1940.4	1607.0	1356.1	1192.3	1105.2	1071.3	1068.0
20°	3199.3	3015.1	2580.0	2125.7	1713.2	1385.5	1158.4	1036.3	977.5	949.3	948.2
22.5°	3194.8	2972.2	2462.5	1940.4	1512.1	1214.9	1027.3	941.4	904.1	884.9	884.9
25°	3206.1	2941.7	2339.3	1764.1	1333.5	1069.1	936.9	878.1	856.6	846.5	843.1
27.5°	3241.2	2928.1	2217.3	1587.8	1169.7	969.6	875.8	835.2	819.3	811.4	812.5
30°	3307.8	2927.0	2097.5	1413.8	1047.6	893.9	827.2	799.0	786.6	782.0	780.9
32.5°	3415.2	2951.8	1980.0	1270.2	944.8	830.6	782.0	761.7	756.0	752.7	751.5
35°	3597.1	3021.9	1863.5	1139.1	865.7	774.1	739.1	728.9	721.0	724.4	725.5
37.5°	3842.4	3142.8	1752.8	1036.3	805.8	732.3	702.9	693.9	689.4	692.8	696.1
40°	4171.2	3316.9	1660.1	953.8	762.8	697.3	671.3	663.4	658.9	664.5	665.6
42.5°	4534.0	3518.0	1583.3	889.4	727.8	667.9	643.0	634.0	630.6	634.0	635.1
45°	4906.9	3752.0	1543.7	843.1	698.4	646.4	620.4	610.3	602.3	600.1	603.5
47.5°	5274.2	3955.4	1542.6	814.8	674.7	627.2	599.0	587.7	577.5	571.8	570.7
50°	5573.7	4117.0	1569.7	802.4	654.3	605.7	577.5	566.2	552.6	541.3	543.6
52.5°	5799.7	4222.1	1582.2	796.7	643.0	583.1	554.9	544.7	528.9	514.2	514.2
55°	5945.5	4246.9	1551.6	791.1	634.0	559.4	528.9	519.9	504.0	489.3	489.3
57.5°	5995.2	4170.1	1442.0	777.5	625.0	539.1	502.9	495.0	482.6	467.9	465.6
60°	5880.0	3910.2	1249.9	736.8	606.9	517.6	474.6	471.3	466.7	454.3	453.2
62.5°	5435.8	3358.7	1040.8	683.7	576.4	495.0	448.7	454.3	457.7	450.9	449.8
65°	4696.7	2727.0	889.4	610.3	535.7	463.3	420.4	435.1	444.1	444.1	441.9
67.5°	3809.6	2094.1	749.3	547.0	484.8	420.4	388.8	400.1	406.8	404.6	410.2
70°	2707.7	1418.3	610.3	474.6	420.4	371.8	348.1	348.1	343.6	341.3	341.3
72.5°	1313.2	810.3	495.0	396.7	358.2	317.6	298.3	290.4	281.4	280.3	274.6
73°	1097.3	726.7	472.4	382.0	343.6	309.6	288.2	275.7	270.1	265.6	264.4
75°	667.9	551.5	394.4	322.1	292.7	266.7	247.5	236.2	230.5	227.2	226.0
77.5°	439.6	411.4	306.3	246.4	223.8	207.9	200.0	188.7	185.3	180.8	180.8
80°	327.7	314.2	219.2	174.0	160.5	146.9	144.7	142.4	133.4	127.7	125.4
82.5°	211.3	223.8	149.2	116.4	101.7	90.4	91.5	94.9	85.9	78.0	75.7
85°	150.3	161.6	90.4	53.1	42.9	37.3	41.8	37.3	38.4	30.5	24.9
87.5°	24.9	42.9	15.8	6.8	3.4	2.3	0.0	0.0	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)