

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: P458475

Luminaire Tested: **GALN-SA9D-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458475
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-SA9D-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52541 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

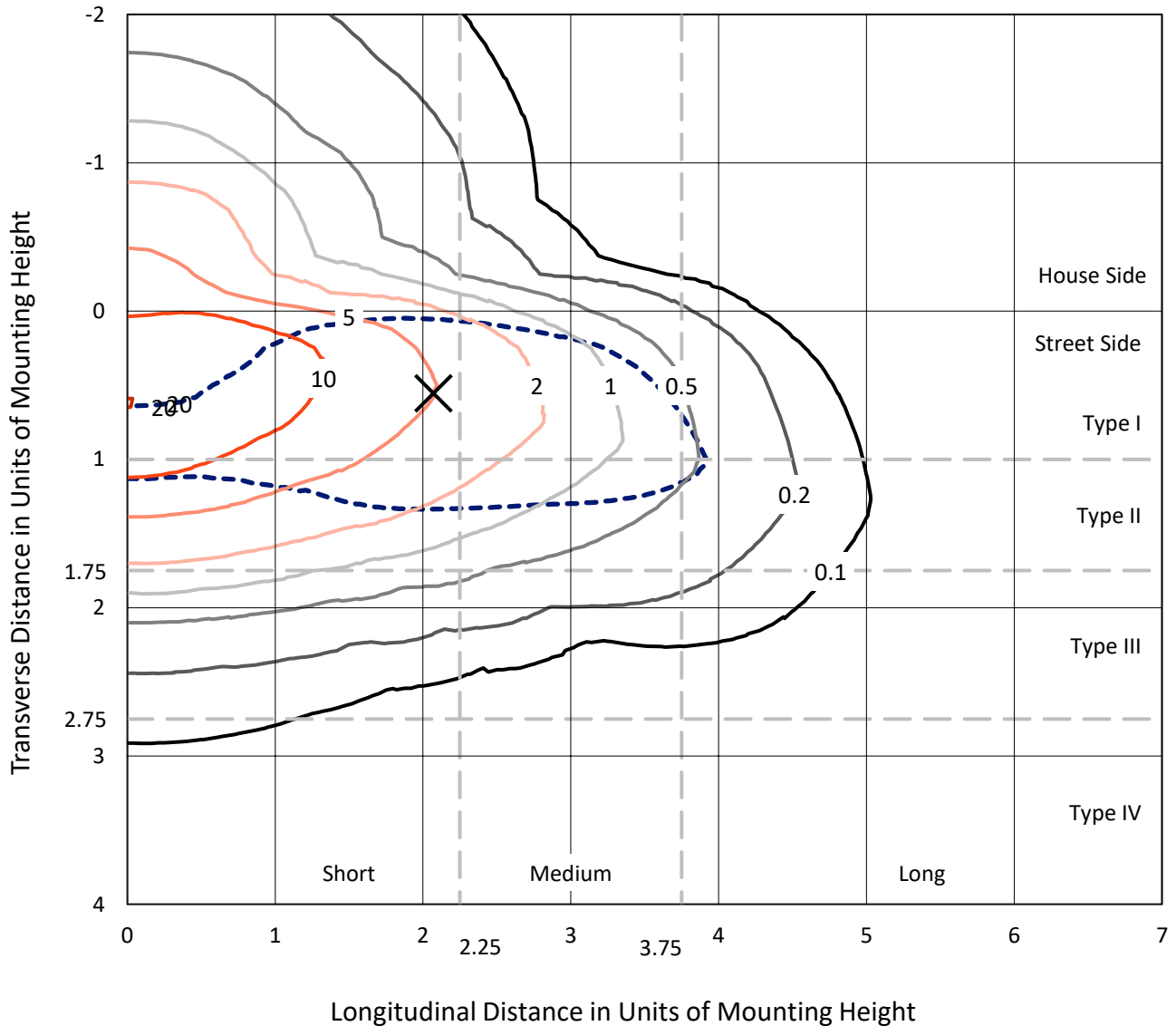
Input Watts (W): 552
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P458475
 CATALOG NUMBER: GALN-SA9D-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

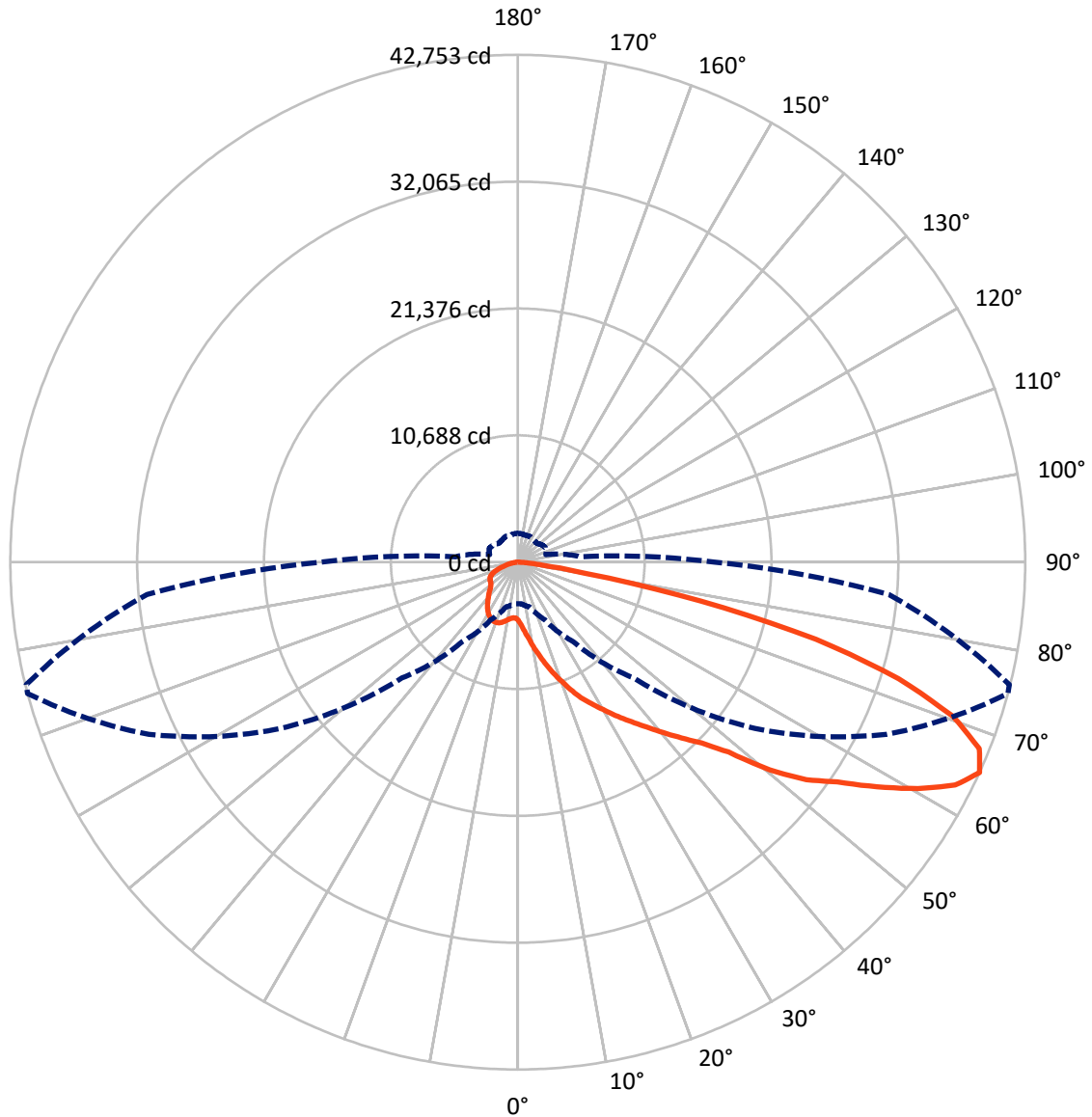
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.3 fc
 Type II - Short - N/A

REPORT NUMBER: P458475
CATALOG NUMBER: GALN-SA9D-827-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P458475

CATALOG NUMBER: GALN-SA9D-827-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8832.8	0.0	8832.8
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	43708.2	0.0	43708.2
	% Fixture	83.2	0.0	83.2
Total	Lumens	52541.0	0.0	52541.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	593.1	1.1
10°-20°	2323.1	4.4
20°-30°	4487.5	8.5
30°-40°	7289.1	13.9
40°-50°	10026.8	19.1
50°-60°	11838.3	22.5
60°-70°	10372.3	19.7
70°-80°	4951.8	9.4
80°-90°	658.9	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°	52541.0	100.0
0°-180°	52541.0	100.0

Coefficient of Utilization



REPORT NUMBER: P458475

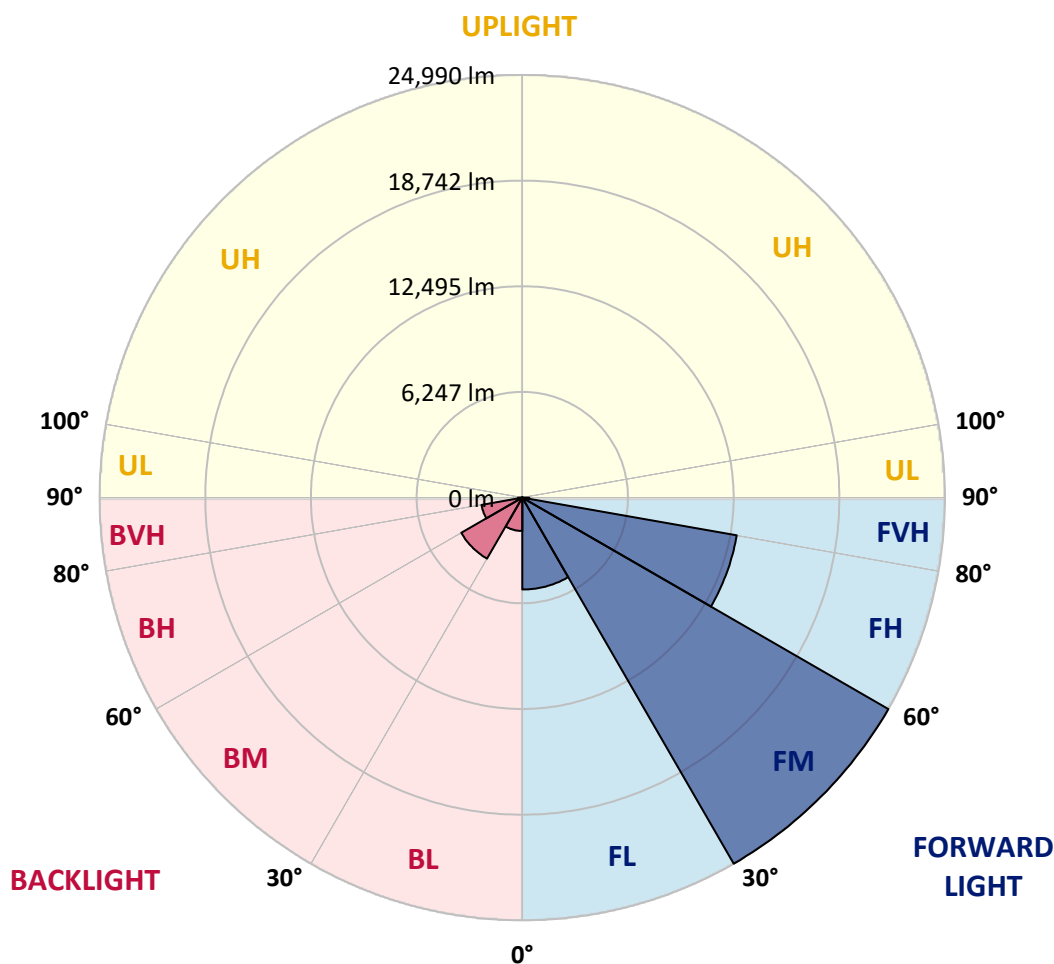
CATALOG NUMBER: GALN-SA9D-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5431.9	10.3			
FM	(30°-60°)	24989.6	47.6			
FH	(60°-80°)	12874.9	24.5			G5
FVH	(80°-90°)	411.8	0.8			G3/500
BL	(0°-30°)	1971.9	3.8	B3/2500		
BM	(30°-60°)	4164.6	7.9	B3/5000		
BH	(60°-80°)	2449.2	4.7	B3/2500		G3/2500
BVH	(80°-90°)	247.1	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type II Short





REPORT NUMBER: P458475
 CATALOG NUMBER: GALN-SA9D-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7
2.5°	6486.2	6443.4	6397.8	6272.4	6138.5	5987.4	5770.9	5562.8	5286.4	5277.8	5072.7
5°	8284.4	8255.9	8053.6	7936.7	7626.1	7212.9	6862.3	6318.0	5813.6	5753.8	5354.8
7.5°	9937.3	9826.1	9749.2	9538.3	9230.5	8700.5	8022.2	7287.0	6443.4	6363.6	5702.5
10°	11182.6	11171.3	11131.4	10949.0	10718.1	10190.9	9438.6	8384.1	7241.4	7084.6	6124.2
12.5°	12114.5	12123.1	12117.4	12114.5	11949.2	11501.8	10686.8	9575.4	8047.9	7936.7	6611.6
15°	12727.2	12812.7	12846.9	12989.4	13003.7	12704.4	12003.4	10726.7	8956.9	8791.7	7135.9
17.5°	13131.9	13174.7	13334.3	13576.5	13773.1	13719.0	13094.9	11792.5	9886.0	9609.6	7680.2
20°	13519.5	13593.6	13716.1	14046.7	14394.4	14554.0	14115.1	12884.0	10806.5	10629.8	8281.5
22.5°	14326.0	14431.4	14474.2	14642.3	14938.7	15220.8	15021.3	13929.9	11815.3	11575.9	8919.9
25°	15691.0	15802.2	15682.5	15642.6	15739.5	15879.1	15836.4	14915.9	12767.1	12425.2	9524.1
27.5°	17469.3	17483.6	17249.9	17027.6	16788.2	16717.0	16585.9	15790.8	13593.6	13308.6	10131.1
30°	19378.7	19310.3	18922.7	18520.9	18116.2	17717.3	17341.1	16634.3	14514.1	14186.3	10726.7
32.5°	21151.3	21114.2	20683.9	20059.8	19375.9	18999.7	18238.8	17486.4	15500.1	15183.8	11339.4
35°	22479.3	22533.4	22060.4	21379.3	20632.6	20299.2	19338.8	18381.3	16520.3	16175.5	12006.2
37.5°	23422.6	23394.1	22975.2	22385.2	21729.8	21439.1	20624.1	19358.8	17617.5	17286.9	12735.8
40°	23758.9	23741.8	23431.1	23000.8	22584.7	22482.1	21969.2	20413.2	18874.3	18486.7	13613.5
42.5°	23545.1	23582.2	23377.0	23260.1	23183.2	23257.3	23305.7	21795.3	20245.0	19888.8	14565.4
45°	22889.7	22869.7	22841.2	23032.2	23465.3	23952.6	24628.0	23100.6	21735.5	21450.5	15842.1
47.5°	21718.4	21860.9	21932.1	22459.3	23405.5	24559.7	26149.8	24850.3	23898.5	23650.6	17788.5
50°	20079.8	20193.7	20615.5	21553.1	22963.8	24787.6	27637.4	27711.5	27506.4	27041.8	19903.1
52.5°	17520.6	17697.3	18566.5	20284.9	22057.5	24693.6	28538.0	30165.2	30436.0	30088.3	21986.3
55°	14656.6	14904.5	15822.1	18076.3	20809.3	24180.6	29159.2	31587.3	32667.4	32345.3	23992.5
57.5°	11852.4	12114.5	13057.8	15240.8	18632.1	23046.4	29566.8	33171.8	35705.3	35286.3	26489.0
60°	8882.9	9156.4	9965.8	12214.3	15531.5	20829.3	29290.3	34545.4	38740.3	38560.8	28988.3
62.5°	5731.0	6033.0	6736.9	8597.9	11937.8	17799.9	27811.3	35303.4	41367.8	41151.2	30812.1
65°	3491.0	3525.2	3912.8	5337.7	8170.4	13781.7	24428.6	34297.4	42752.8	42687.3	31367.8
67.5°	2257.0	2311.2	2487.9	3197.5	4898.8	9572.5	19532.6	30977.4	41943.5	41920.7	30219.4
70°	1906.5	1923.6	2003.4	2157.3	2847.0	5805.1	13716.1	25685.3	38868.5	38868.5	27457.9
72.5°	1704.2	1727.0	1755.5	1803.9	2031.9	3288.7	8184.7	19994.3	33559.3	33781.6	23371.3
75°	1547.4	1541.7	1558.8	1567.4	1732.7	2148.8	4232.0	14787.7	25961.8	25517.2	16925.0
77.5°	1325.2	1333.7	1325.2	1362.2	1530.3	1635.8	2148.8	9923.0	15733.8	15158.1	8495.3
80°	1088.6	1102.9	1117.1	1139.9	1308.1	1242.5	1291.0	4522.6	5819.3	5696.8	2624.7
82.5°	817.9	837.8	860.6	914.8	1028.8	820.7	815.0	1932.2	2100.3	1923.6	966.1
85°	330.6	390.4	589.9	644.1	646.9	450.3	501.6	806.5	857.8	837.8	379.0
87.5°	76.9	91.2	190.9	287.8	265.0	168.1	185.2	262.2	299.2	276.4	128.2
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: P458475
 CATALOG NUMBER: GALN-SA9D-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7	4881.7
2.5°	4978.6	4878.9	4707.9	4576.8	4482.7	4400.1	4348.8	4317.5	4306.1	4303.2	4306.1
5°	5146.8	4970.1	4699.3	4528.3	4434.3	4380.2	4348.8	4346.0	4348.8	4351.7	4343.1
7.5°	5377.6	5124.0	4770.6	4611.0	4539.7	4499.8	4485.6	4479.9	4482.7	4479.9	4479.9
10°	5685.4	5337.7	4910.2	4744.9	4685.1	4639.5	4616.7	4602.4	4591.0	4579.6	4573.9
12.5°	6024.5	5574.2	5061.3	4901.7	4816.2	4744.9	4693.6	4656.6	4630.9	4605.3	4599.6
15°	6403.5	5825.0	5229.4	5007.1	4884.6	4779.1	4690.8	4630.9	4585.3	4548.3	4545.4
17.5°	6765.4	6061.5	5343.4	5055.6	4876.0	4727.8	4611.0	4528.3	4471.4	4422.9	4417.2
20°	7153.0	6286.7	5394.7	5024.2	4790.5	4611.0	4457.1	4357.4	4291.8	4237.7	4229.1
22.5°	7543.4	6477.6	5389.0	4924.5	4642.3	4431.5	4269.0	4163.6	4086.6	4032.5	4012.5
25°	7916.8	6631.5	5317.7	4764.9	4437.2	4217.7	4052.4	3955.5	3887.1	3821.6	3821.6
27.5°	8253.0	6722.7	5183.8	4571.1	4226.3	3995.4	3864.3	3776.0	3713.3	3670.6	3644.9
30°	8583.6	6765.4	5001.4	4326.0	4004.0	3807.3	3701.9	3650.6	3593.6	3545.2	3539.5
32.5°	8880.0	6756.9	4773.4	4086.6	3793.1	3653.5	3610.7	3570.8	3511.0	3442.6	3425.5
35°	9167.8	6699.9	4502.7	3824.4	3616.4	3562.3	3573.7	3516.7	3408.4	3322.9	3308.6
37.5°	9481.3	6597.3	4206.3	3610.7	3468.2	3519.5	3548.0	3422.6	3245.9	3112.0	3080.6
40°	9843.2	6480.5	3898.5	3397.0	3351.4	3479.6	3479.6	3248.8	3006.5	2923.9	2901.1
42.5°	10267.9	6383.6	3642.1	3217.4	3254.5	3382.7	3368.5	3017.9	2918.2	2875.5	2864.1
45°	10940.4	6349.4	3377.0	3060.7	3174.7	3268.7	3151.9	2938.2	2881.2	2847.0	2835.6
47.5°	12003.4	6389.3	3143.3	2943.9	3083.5	3154.7	2909.7	2884.0	2844.1	2795.7	2790.0
50°	12989.4	6352.2	2978.1	2878.3	3003.7	3017.9	2809.9	2818.5	2795.7	2741.5	2730.1
52.5°	13795.9	6235.4	2872.6	2844.1	2935.3	2778.6	2715.9	2747.2	2738.7	2670.3	2658.9
55°	14682.2	6164.1	2821.3	2844.1	2889.7	2570.5	2627.5	2673.1	2661.7	2613.3	2610.4
57.5°	15756.6	6178.4	2784.3	2852.7	2844.1	2465.1	2539.2	2593.3	2590.5	2576.2	2576.2
60°	16856.6	6184.1	2727.3	2849.8	2790.0	2382.4	2448.0	2524.9	2530.6	2539.2	2539.2
62.5°	17221.4	5936.2	2616.1	2798.5	2670.3	2302.6	2362.5	2467.9	2462.2	2485.0	2487.9
65°	16540.3	5249.3	2450.8	2681.7	2516.4	2245.6	2296.9	2393.8	2362.5	2422.3	2433.7
67.5°	15055.5	4343.1	2194.4	2470.8	2345.4	2185.8	2254.2	2291.2	2234.3	2351.1	2353.9
70°	13012.2	3391.3	1869.5	2171.6	2151.6	2123.1	2220.0	2163.0	2083.2	2225.7	2197.2
72.5°	10880.6	2590.5	1493.3	1775.4	1892.3	2029.1	2160.2	1997.7	1886.6	1929.3	1878.0
75°	8173.3	1915.1	1199.8	1390.7	1575.9	1895.1	2106.0	1798.2	1627.2	1587.3	1575.9
77.5°	4166.4	1251.1	897.7	1040.2	1182.7	1712.7	2031.9	1564.5	1348.0	1285.3	1256.8
80°	1487.6	778.0	632.7	718.2	797.9	1473.4	1775.4	1293.8	1045.9	1034.5	1045.9
82.5°	689.7	501.6	424.6	470.2	473.1	983.2	1353.7	966.1	795.1	1208.3	1020.2
85°	296.4	250.8	239.4	233.7	216.6	438.9	760.9	518.7	809.3	361.9	333.4
87.5°	88.3	99.7	88.3	65.5	48.4	48.4	76.9	28.5	19.9	14.2	14.2
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)