

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: P651651

Luminaire Tested: **GALN-SA9D-840-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42666.5 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

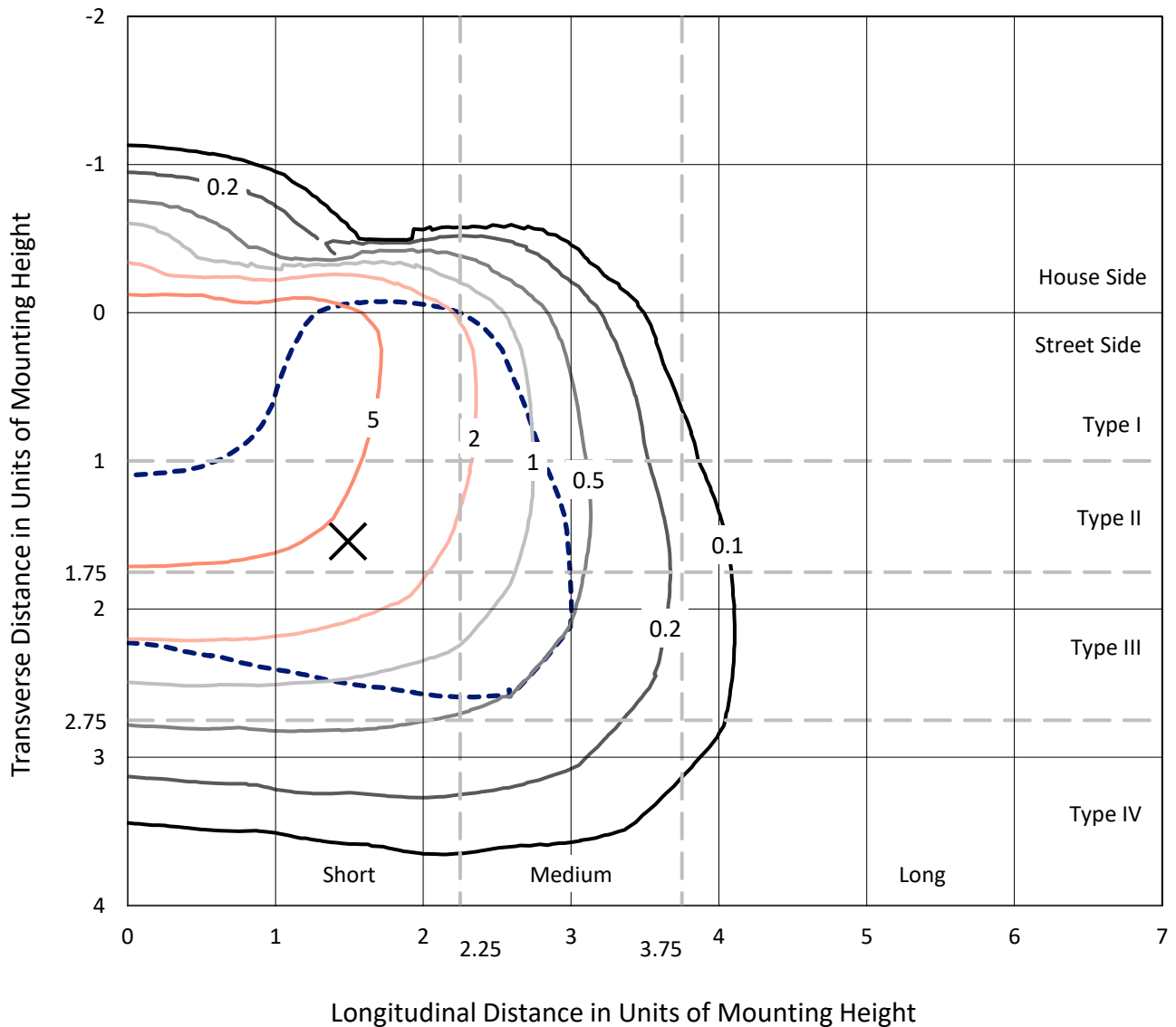
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651651
 CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

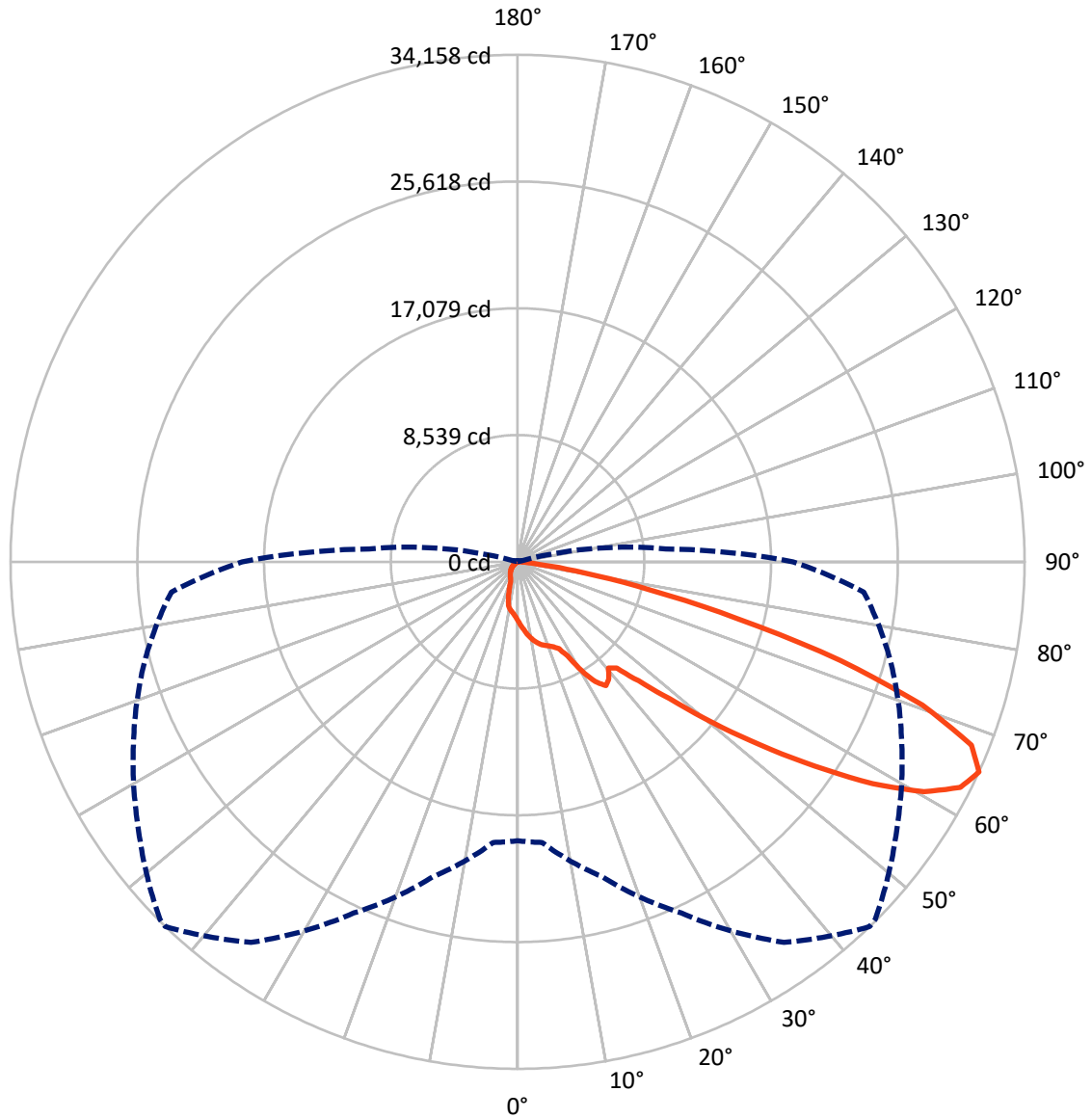
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type III - Short - N/A

REPORT NUMBER: P651651
CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P651651
 CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3931.1	0.0	3931.1
	% Fixture	9.2	0.0	9.2
Street Side	Lumens	38735.4	0.0	38735.4
	% Fixture	90.8	0.0	90.8
Total	Lumens	42666.5	0.0	42666.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.9	0.9
10°-20°	1188.7	2.8
20°-30°	2015.6	4.7
30°-40°	3351.2	7.9
40°-50°	5851.3	13.7
50°-60°	11431.4	26.8
60°-70°	13263.1	31.1
70°-80°	4829.8	11.3
80°-90°	340.3	0.8
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°	42666.5	100.0
0°-180°	42666.5	100.0

Coefficient of Utilization



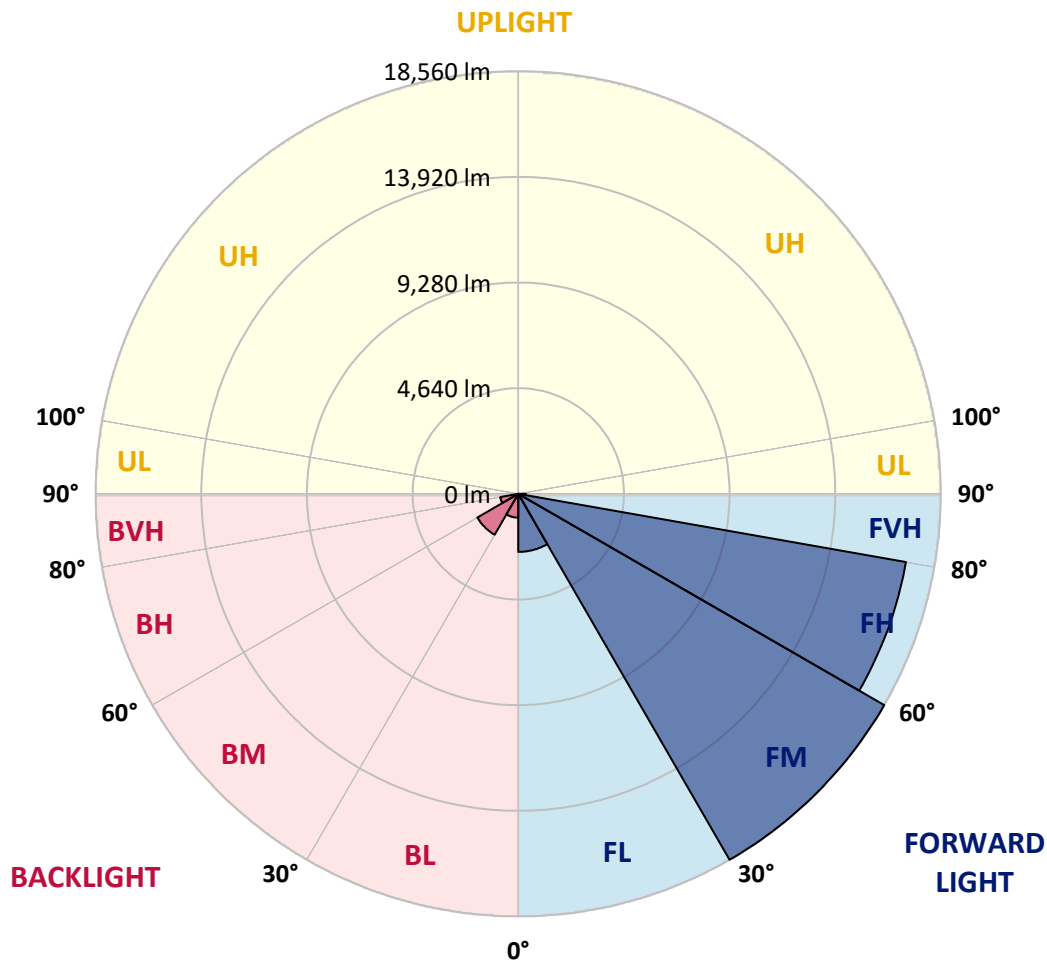
REPORT NUMBER: P651651
 CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2551.8	6.0			
FM (30°-60°)	18560.0	43.5			
FH (60°-80°)	17287.9	40.5			G5
FVH (80°-90°)	335.7	0.8			G3/500
BL (0°-30°)	1047.4	2.5	B3/2500		
BM (30°-60°)	2074.1	4.9	B2/2500		
BH (60°-80°)	805.0	1.9	B2/1000		G2/1000
BVH (80°-90°)	4.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





REPORT NUMBER: P651651

CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9
2.5°	4469.8	4450.2	4440.5	4388.3	4349.1	4300.3	4300.3	4238.3	4166.6	4088.4	4016.6
5°	4968.6	4936.0	4893.6	4847.9	4756.7	4626.3	4626.3	4495.9	4345.9	4212.2	4065.6
7.5°	5447.8	5418.6	5346.8	5258.8	5108.8	4971.9	4962.1	4773.0	4593.7	4391.5	4182.9
10°	5868.4	5845.6	5783.6	5614.1	5457.7	5278.4	5275.1	5063.2	4854.5	4606.7	4349.1
12.5°	6161.8	6165.1	6083.6	5920.6	5718.5	5548.9	5535.9	5327.2	5108.8	4841.5	4525.3
15°	6370.5	6370.5	6285.7	6103.1	5920.6	5770.6	5757.6	5575.0	5350.0	5059.9	4717.6
17.5°	6429.2	6448.8	6357.5	6194.5	6047.7	5917.4	5914.1	5760.8	5581.5	5301.2	4913.2
20°	6406.4	6425.9	6354.2	6227.1	6126.0	6051.0	6041.2	5979.3	5813.0	5548.9	5121.9
22.5°	6357.5	6377.1	6324.9	6249.9	6200.9	6223.8	6207.5	6259.6	6171.7	5852.1	5369.6
25°	6367.2	6386.8	6347.7	6305.3	6347.7	6487.9	6530.3	6755.2	6677.0	6236.9	5637.0
27.5°	6673.8	6712.9	6657.4	6677.0	6827.0	7153.0	7234.5	7622.4	7276.8	6725.9	6054.3
30°	7355.1	7329.1	7224.7	7319.2	7840.9	8532.0	8509.2	8447.3	7906.1	7289.9	6549.8
32.5°	7974.5	7951.7	7945.2	8352.7	9298.2	9634.0	9617.7	9017.8	8470.1	7935.4	7038.8
35°	8225.6	8137.6	8118.0	9105.8	10687.1	10243.7	10142.6	9252.6	9154.8	8639.7	7537.7
37.5°	8982.0	8920.0	8616.8	9229.7	10132.9	9986.1	9907.9	9656.9	9885.0	9262.4	8101.7
40°	10540.3	10367.6	10093.7	9493.8	9347.1	9409.0	9487.3	10175.2	10749.0	10113.3	8854.8
42.5°	12476.9	12437.8	11929.2	10811.0	9712.3	9797.1	9898.1	11257.6	11991.1	11394.5	10083.9
45°	14801.5	14856.9	14123.3	12803.0	11361.9	11433.6	11580.4	12855.1	13673.5	13386.5	12017.2
47.5°	16914.1	16871.7	16624.0	15251.5	13921.2	13761.5	13999.5	14905.8	16001.3	16046.9	14416.8
50°	19039.8	19264.8	18896.3	18358.4	17370.6	17034.8	16946.7	17390.1	19059.4	18840.9	17298.9
52.5°	22094.7	22212.0	21520.9	21383.9	21608.9	20520.0	20431.9	20539.5	22032.7	21282.9	19457.1
55°	24014.9	23946.5	23689.0	24758.3	25648.3	24288.8	24178.0	23744.4	24500.7	23007.5	21533.9
57.5°	24621.4	24719.2	25319.1	27252.4	29358.5	28204.4	28002.2	26769.9	26280.8	24614.8	23444.4
60°	24350.7	24530.0	25824.3	28699.9	31621.1	31448.3	31275.5	29205.2	27558.8	25958.1	24784.4
62.5°	22423.9	22675.0	24745.2	28442.4	32387.2	33466.4	33251.2	30724.5	28409.7	26610.1	25019.1
65°	18792.1	18977.8	21951.2	26104.7	31298.3	34157.6	34079.3	31200.5	28543.5	26013.5	23411.8
67.5°	13396.4	14028.8	16783.8	22000.1	28077.2	32977.4	33111.0	30630.0	27288.3	23434.6	19388.7
70°	8421.2	8851.5	10827.3	15750.2	22508.7	28931.4	29371.5	28018.5	23682.4	18267.1	12979.0
72.5°	4016.6	4336.1	5744.5	9969.8	15887.2	22763.0	23111.9	23001.0	18312.8	11508.7	6696.5
75°	1789.9	1910.5	2741.8	5089.2	10256.8	15300.3	16203.4	16353.4	11443.5	5630.4	2604.9
77.5°	912.9	916.1	1284.5	2464.7	5121.9	9128.7	9308.0	9832.9	6204.2	2481.0	906.3
80°	485.8	518.4	681.4	1163.9	2657.1	4495.9	4473.0	4916.5	2751.7	1216.1	303.2
82.5°	218.4	241.3	384.7	609.6	1297.6	1705.1	1838.8	2011.6	1180.2	775.9	133.6
85°	65.2	78.2	189.1	306.5	469.4	492.3	550.9	710.7	668.3	550.9	68.5
87.5°	9.8	9.8	78.2	84.8	68.5	88.1	91.2	101.1	215.2	202.2	35.8
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: P651651
 CATALOG NUMBER: GALN-SA9D-840-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9	3970.9
2.5°	3977.5	3954.6	3873.1	3804.7	3746.0	3710.2	3667.8	3641.7	3628.7	3618.9	3622.1
5°	3993.8	3938.4	3798.2	3687.4	3602.6	3511.3	3449.4	3413.5	3397.1	3371.1	3371.1
7.5°	4085.1	3997.0	3801.4	3631.9	3485.2	3361.3	3243.9	3201.5	3172.3	3165.7	3159.1
10°	4215.5	4104.7	3837.3	3602.6	3393.9	3224.4	3058.1	2911.4	2797.3	2728.8	2719.0
12.5°	4378.5	4218.8	3892.7	3583.0	3315.6	3015.7	2575.6	2278.9	2080.0	2018.1	2027.9
15°	4528.4	4355.7	3948.2	3566.7	3172.3	2500.6	2001.7	1662.7	1561.7	1551.9	1555.2
17.5°	4707.7	4502.4	4013.3	3543.9	2777.7	1910.5	1486.6	1395.4	1415.0	1447.5	1444.2
20°	4893.6	4658.9	4091.6	3407.0	2217.0	1437.8	1313.9	1323.6	1353.0	1382.4	1388.8
22.5°	5092.5	4838.2	4182.9	3077.6	1692.1	1251.9	1245.4	1258.5	1287.8	1320.4	1326.9
25°	5366.3	5063.2	4251.3	2647.3	1281.3	1157.4	1170.4	1193.2	1219.4	1255.2	1261.8
27.5°	5718.5	5366.3	4287.2	2086.5	1108.5	1072.6	1075.9	1108.5	1141.1	1173.7	1173.7
30°	6174.9	5728.2	4215.5	1578.0	1023.7	991.1	978.1	997.6	1040.0	1072.6	1075.9
32.5°	6582.4	6070.6	4026.4	1206.3	961.8	916.1	883.6	886.8	903.1	922.7	925.9
35°	6990.0	6403.1	3703.6	1013.9	896.6	844.4	795.5	769.4	756.4	746.6	756.4
37.5°	7511.6	6817.1	3273.3	922.7	841.2	775.9	707.4	652.0	606.4	577.1	583.6
40°	8183.2	7391.0	2764.7	864.0	788.9	710.7	619.5	547.7	469.4	443.4	430.3
42.5°	9291.7	8261.5	2230.0	815.1	736.8	642.3	528.1	430.3	358.6	332.5	339.1
45°	11042.4	9360.2	1718.2	762.9	684.7	567.3	443.4	339.1	280.4	267.4	273.8
47.5°	13363.7	10781.6	1323.6	704.3	619.5	485.8	348.8	267.4	231.4	228.2	225.0
50°	15548.1	12105.3	1105.2	639.0	541.2	404.3	286.9	225.0	202.2	198.9	198.9
52.5°	17523.8	13054.0	899.8	564.1	456.4	332.5	241.3	198.9	179.3	169.5	169.5
55°	19281.1	13673.5	730.3	472.7	358.6	264.1	208.7	179.3	156.5	143.5	140.2
57.5°	20607.9	13748.4	547.7	378.2	267.4	205.4	179.3	156.5	130.4	114.1	107.6
60°	21175.3	13099.7	404.3	286.9	198.9	163.0	143.5	127.2	97.8	81.5	78.2
62.5°	20604.8	11837.9	299.9	218.4	153.2	120.6	101.1	94.5	68.5	48.9	45.7
65°	18560.5	10015.5	238.0	166.3	114.1	88.1	65.2	62.0	42.4	22.8	19.6
67.5°	14870.0	7844.2	189.1	123.9	81.5	58.7	42.4	39.1	22.8	6.6	6.6
70°	9669.9	5014.2	153.2	91.2	52.1	39.1	26.1	19.6	13.0	3.3	0.0
72.5°	4782.8	2344.1	123.9	71.7	35.8	19.6	9.8	6.6	9.8	0.0	0.0
75°	1855.1	834.6	91.2	48.9	19.6	9.8	6.6	0.0	3.3	0.0	0.0
77.5°	616.2	277.1	55.4	26.1	13.0	6.6	0.0	0.0	0.0	0.0	0.0
80°	228.2	107.6	29.4	16.3	6.6	3.3	0.0	0.0	0.0	0.0	0.0
82.5°	91.2	42.4	19.6	13.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	45.7	26.1	13.0	9.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	32.6	19.6	13.0	9.8	6.6	3.3	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)