

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: P453615

Luminaire Tested: **GALN-SA4C-830-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4C-830-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18107 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 213
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

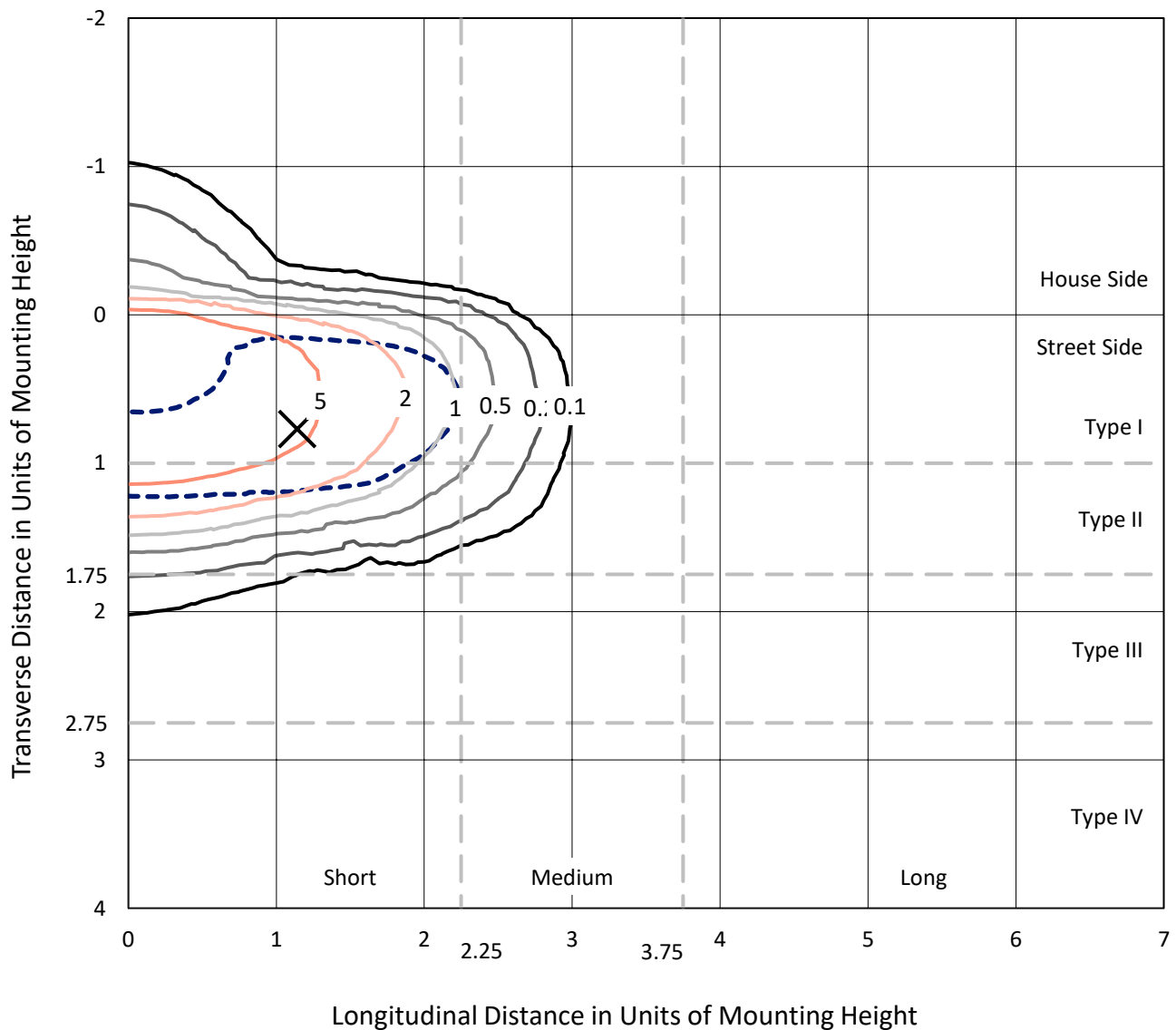


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Iso-Footcandle Lines of Horizontal Illumination

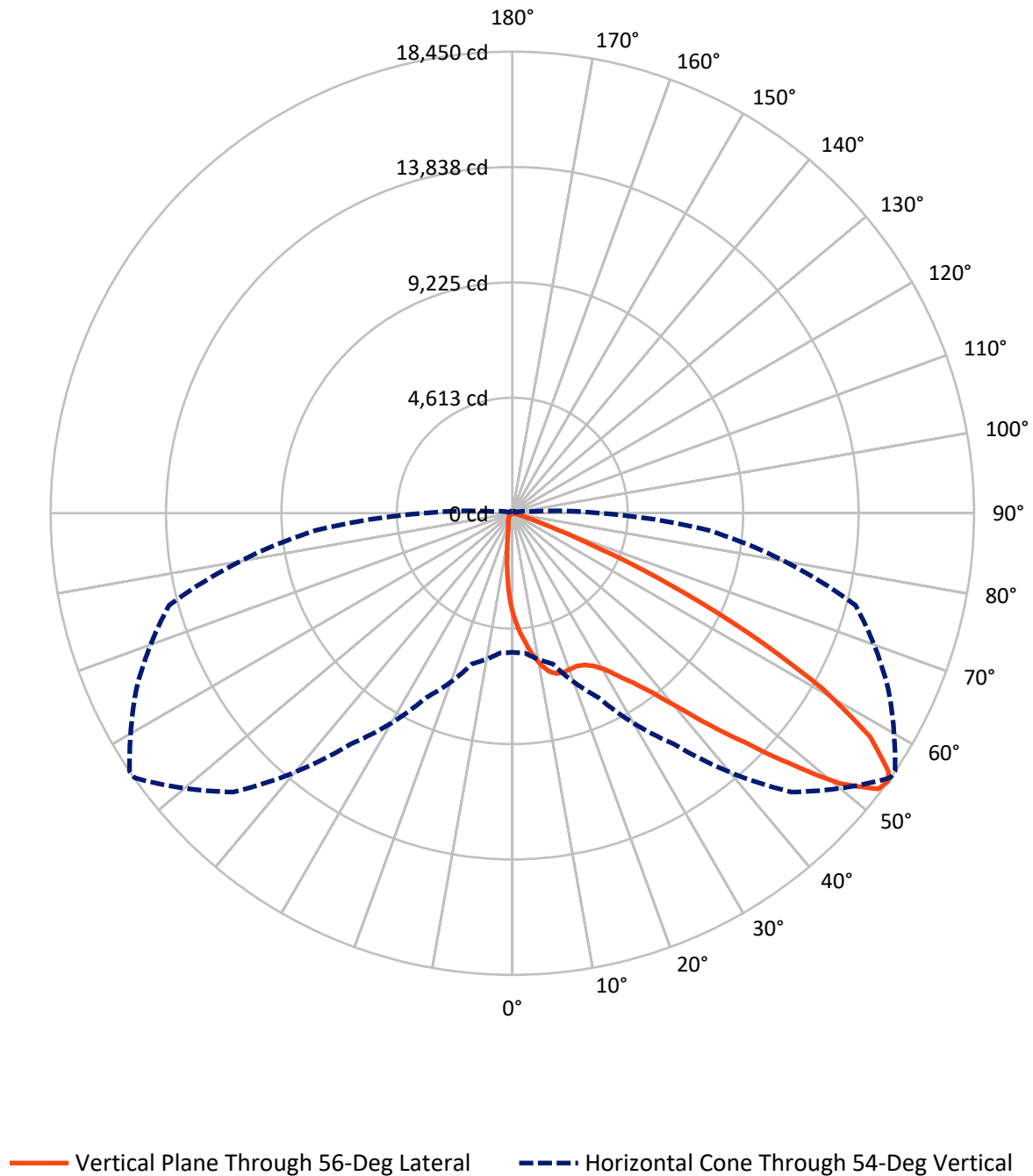
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	856.2	0.0	856.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	17250.8	0.0	17250.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	18107.0	0.0	18107.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.5	2.0
10°-20°	961.0	5.3
20°-30°	1664.4	9.2
30°-40°	2872.9	15.9
40°-50°	4889.8	27.0
50°-60°	4839.1	26.7
60°-70°	2208.7	12.2
70°-80°	283.6	1.6
80°-90°	32.0	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°	18107.0	100.0
0°-180°	18107.0	100.0

Coefficient of Utilization



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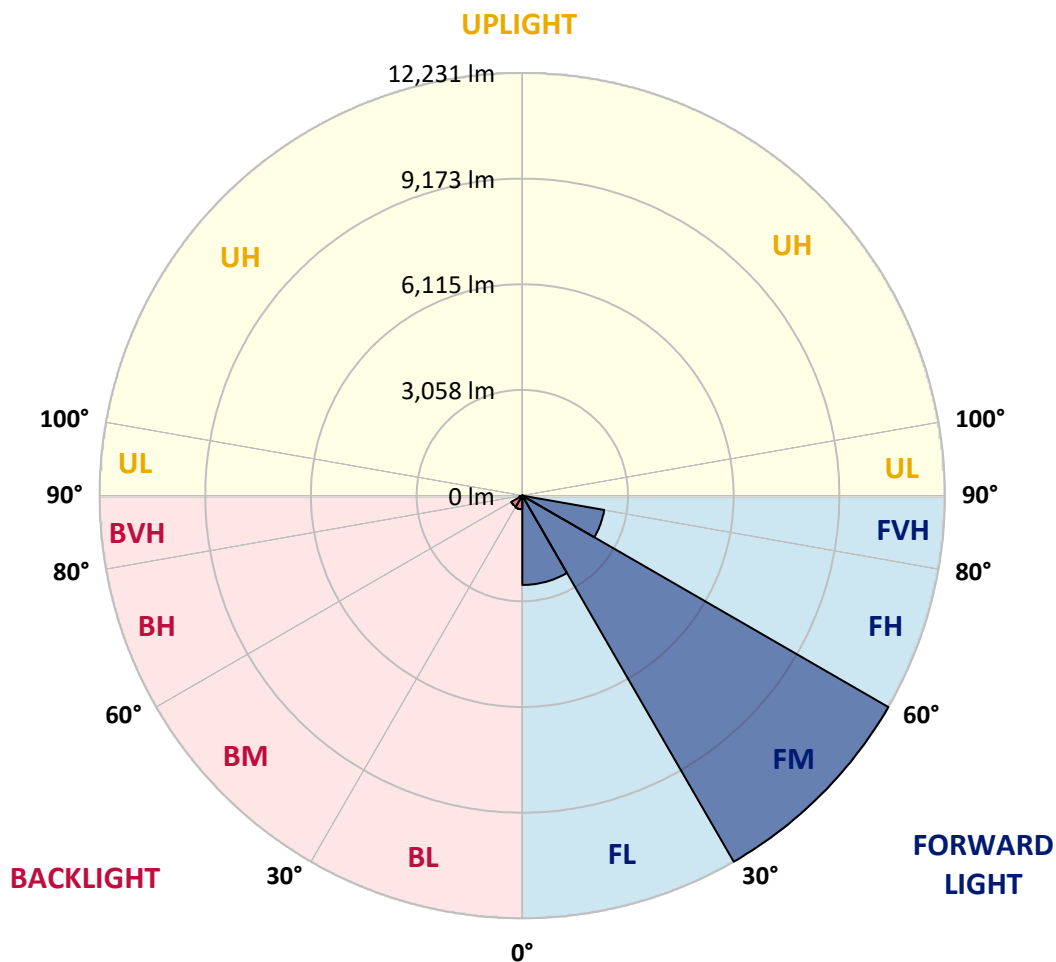
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2584.8	14.3			
FM	(30°-60°)	12230.8	67.5			
FH	(60°-80°)	2406.6	13.3			G2/5000
FVH	(80°-90°)	28.5	0.2			G1/100
BL	(0°-30°)	396.0	2.2	B1/500		
BM	(30°-60°)	371.1	2.0	B1/1000		
BH	(60°-80°)	85.7	0.5	B0/110		G0/110
BVH	(80°-90°)	3.4	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°	56°	65°	75°	85°
0°	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9
2.5°	5112.6	5077.1	5028.3	4990.4	4901.2	4772.9	4637.3	4637.3	4506.6	4324.6	4138.9
5°	5896.8	5873.6	5826.0	5728.3	5628.1	5448.5	5176.1	5128.4	4895.1	4565.3	4218.3
7.5°	6215.7	6226.7	6229.1	6203.5	6155.8	5978.7	5708.7	5675.7	5303.1	4860.9	4322.2
10°	5910.3	5964.0	6016.6	6122.9	6273.1	6315.9	6163.2	6129.0	5762.5	5160.2	4434.5
12.5°	5455.8	5485.2	5514.5	5681.8	5983.6	6329.3	6489.3	6488.1	6177.8	5458.3	4577.5
15°	5244.5	5270.1	5272.6	5347.1	5608.5	6111.9	6628.6	6646.9	6583.4	5826.0	4731.4
17.5°	5288.5	5309.2	5292.1	5310.5	5447.3	5872.4	6612.7	6673.8	6912.0	6179.0	4870.7
20°	5575.6	5615.9	5549.9	5498.6	5540.1	5808.9	6559.0	6644.5	7144.1	6523.5	4997.7
22.5°	6091.1	6113.1	6030.0	5889.5	5816.2	5942.0	6544.3	6628.6	7342.0	6805.7	5071.0
25°	6664.0	6656.7	6565.1	6407.5	6253.6	6210.8	6640.8	6716.6	7505.7	7059.8	5093.0
27.5°	7237.0	7259.0	7105.0	6909.6	6725.1	6613.9	6857.1	6913.3	7690.2	7349.4	5119.9
30°	7902.8	7867.4	7715.9	7492.3	7281.0	7125.8	7205.2	7221.1	7944.3	7733.0	5190.7
32.5°	8768.9	8671.2	8501.4	8110.5	7959.0	7696.3	7715.9	7735.4	8253.4	8112.9	5276.3
35°	9944.1	9939.2	9607.0	9080.4	8711.5	8385.3	8299.8	8315.7	8721.3	8677.3	5465.6
37.5°	11358.8	11378.3	10999.6	10469.4	9790.2	9272.2	9096.3	9098.8	9432.3	9456.7	5753.9
40°	12510.8	12562.1	12336.1	11978.2	11307.5	10497.5	10201.9	10175.0	10431.6	10401.0	6165.6
42.5°	13006.8	13054.4	13138.7	13263.3	12894.4	12226.2	11528.6	11565.2	11643.4	11429.6	6627.4
45°	12763.7	12839.4	13170.5	13940.1	14287.1	14062.3	13230.3	13102.1	12771.0	12547.4	7091.6
47.5°	11750.9	11935.4	12488.8	13770.3	14984.6	15744.5	15150.8	14981.0	13899.8	13363.5	7387.2
50°	10085.8	10096.8	10867.7	12505.9	14623.0	16806.1	17111.5	16984.4	14951.6	13821.6	7536.3
52.5°	7311.5	7552.2	8258.3	10155.5	13056.9	16644.8	18361.2	18308.7	16036.4	14056.2	7751.3
54°	5558.5	5604.9	6232.8	8115.3	11257.4	15759.1	18438.2	18450.4	16575.2	14197.9	7878.3
55°	4556.7	4445.5	5105.2	6913.3	10029.7	14976.1	18186.5	18245.2	16817.1	14271.2	7972.4
57.5°	2159.9	2161.1	2665.6	3646.6	6281.7	11628.8	16648.5	16856.2	16843.9	14397.0	8261.9
60°	1093.4	1100.7	1211.9	1683.4	3103.0	7730.5	13765.4	14260.2	15547.8	14415.3	8357.2
62.5°	764.7	756.2	737.9	809.9	1305.9	3928.8	10248.3	10678.3	13209.6	13717.8	8054.3
65°	654.8	636.5	585.2	574.2	659.7	1564.9	6383.1	7084.3	10085.8	11878.0	7191.8
67.5°	559.5	552.2	505.8	477.7	466.7	681.7	3293.5	3662.5	6893.7	8538.0	5447.3
70°	475.2	471.6	443.5	408.0	377.5	408.0	1221.6	1513.6	3842.1	4597.0	2570.3
72.5°	386.0	389.7	394.6	349.4	317.6	289.5	521.6	607.2	1607.7	1643.1	899.1
75°	338.4	334.7	334.7	304.2	265.1	215.0	287.1	309.1	492.3	456.9	208.9
77.5°	238.2	229.7	268.8	250.4	221.1	152.7	163.7	173.5	204.0	174.7	97.7
80°	164.9	164.9	172.3	224.8	199.1	111.2	100.2	107.5	120.9	103.8	56.2
82.5°	92.8	95.3	112.4	119.7	116.1	74.5	66.0	67.2	80.6	70.9	35.4
85°	11.0	18.3	64.7	63.5	47.6	33.0	36.6	37.9	50.1	44.0	20.8
87.5°	1.2	2.4	13.4	17.1	12.2	13.4	13.4	13.4	17.1	19.5	14.7
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°	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9	4022.9
2.5°	4038.7	3945.9	3724.8	3468.2	3304.5	3038.2	2813.4	2651.0	2610.6	2532.5	2555.7
5°	4033.8	3840.8	3390.0	2913.6	2405.4	2026.7	1744.5	1522.2	1424.4	1359.7	1314.5
7.5°	4036.3	3734.5	3011.3	2252.7	1645.5	1274.2	1012.7	877.1	786.7	748.9	753.8
10°	4043.6	3614.8	2571.5	1668.8	1110.5	823.4	663.3	598.6	568.1	563.2	562.0
12.5°	4060.7	3484.1	2151.3	1238.7	777.0	598.6	537.5	515.5	505.8	505.8	502.1
15°	4079.1	3340.0	1801.9	921.1	598.6	514.3	486.2	475.2	469.1	469.1	467.9
17.5°	4079.1	3173.8	1475.7	714.7	515.5	472.8	450.8	436.1	431.2	431.2	430.0
20°	4053.4	2980.8	1186.2	575.4	467.9	433.7	411.7	395.8	389.7	387.3	386.0
22.5°	3964.2	2723.0	944.3	494.8	428.8	399.5	371.4	353.1	348.2	345.7	346.9
25°	3805.4	2432.3	747.6	434.9	393.4	357.9	333.5	320.1	315.2	315.2	316.4
27.5°	3641.7	2128.1	592.5	389.7	350.6	318.8	299.3	290.7	289.5	293.2	294.4
30°	3490.2	1822.7	480.1	353.1	312.7	285.9	272.4	270.0	270.0	271.2	272.4
32.5°	3321.6	1555.1	401.9	321.3	282.2	259.0	251.7	251.7	254.1	254.1	256.5
35°	3215.4	1325.5	353.1	290.7	259.0	239.4	234.6	235.8	239.4	244.3	246.8
37.5°	3157.9	1142.2	321.3	266.3	237.0	223.6	218.7	221.1	229.7	238.2	239.4
40°	3162.8	1004.2	295.6	245.5	219.9	205.2	201.6	208.9	217.5	226.0	227.2
42.5°	3216.6	901.6	271.2	221.1	205.2	184.5	183.2	190.6	194.2	202.8	204.0
45°	3280.1	827.0	245.5	195.5	178.4	160.0	161.3	167.4	172.3	185.7	188.1
47.5°	3299.6	775.7	216.2	166.1	146.6	140.5	141.7	145.4	155.1	167.4	168.6
50°	3321.6	744.0	188.1	140.5	124.6	123.4	124.6	127.1	133.2	138.0	136.8
52.5°	3415.7	742.8	164.9	122.2	106.3	108.7	109.9	108.7	103.8	96.5	94.1
54°	3503.7	746.4	153.9	113.6	97.7	101.4	100.2	94.1	81.8	74.5	70.9
55°	3574.5	750.1	147.8	107.5	92.8	94.1	95.3	83.1	67.2	59.9	57.4
57.5°	3713.8	741.5	133.2	94.1	81.8	77.0	75.7	55.0	36.6	31.8	29.3
60°	3644.1	669.5	120.9	80.6	69.6	62.3	51.3	30.5	18.3	13.4	13.4
62.5°	3370.5	568.1	107.5	66.0	57.4	47.6	26.9	17.1	8.6	4.9	3.7
65°	3015.0	477.7	96.5	52.5	45.2	30.5	14.7	11.0	3.7	0.0	0.0
67.5°	2241.7	354.3	81.8	41.5	34.2	19.5	9.8	6.1	1.2	0.0	0.0
70°	1038.4	216.2	69.6	31.8	24.4	14.7	7.3	3.7	0.0	0.0	0.0
72.5°	298.1	135.6	57.4	23.2	17.1	12.2	6.1	2.4	1.2	0.0	0.0
75°	103.8	108.7	42.8	17.1	13.4	8.6	4.9	2.4	1.2	0.0	0.0
77.5°	62.3	88.0	26.9	14.7	11.0	7.3	4.9	2.4	1.2	1.2	0.0
80°	35.4	58.6	17.1	12.2	9.8	6.1	3.7	2.4	1.2	1.2	0.0
82.5°	19.5	28.1	13.4	11.0	8.6	6.1	3.7	2.4	1.2	1.2	1.2
85°	15.9	14.7	11.0	9.8	7.3	4.9	3.7	1.2	0.0	0.0	0.0
87.5°	12.2	9.8	9.8	9.8	7.3	4.9	3.7	1.2	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)