

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: P299995

Luminaire Tested: **GLNA-AF-09-LED-E1-SL3-8030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL3-8030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22200.8 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 290
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: 25 FT



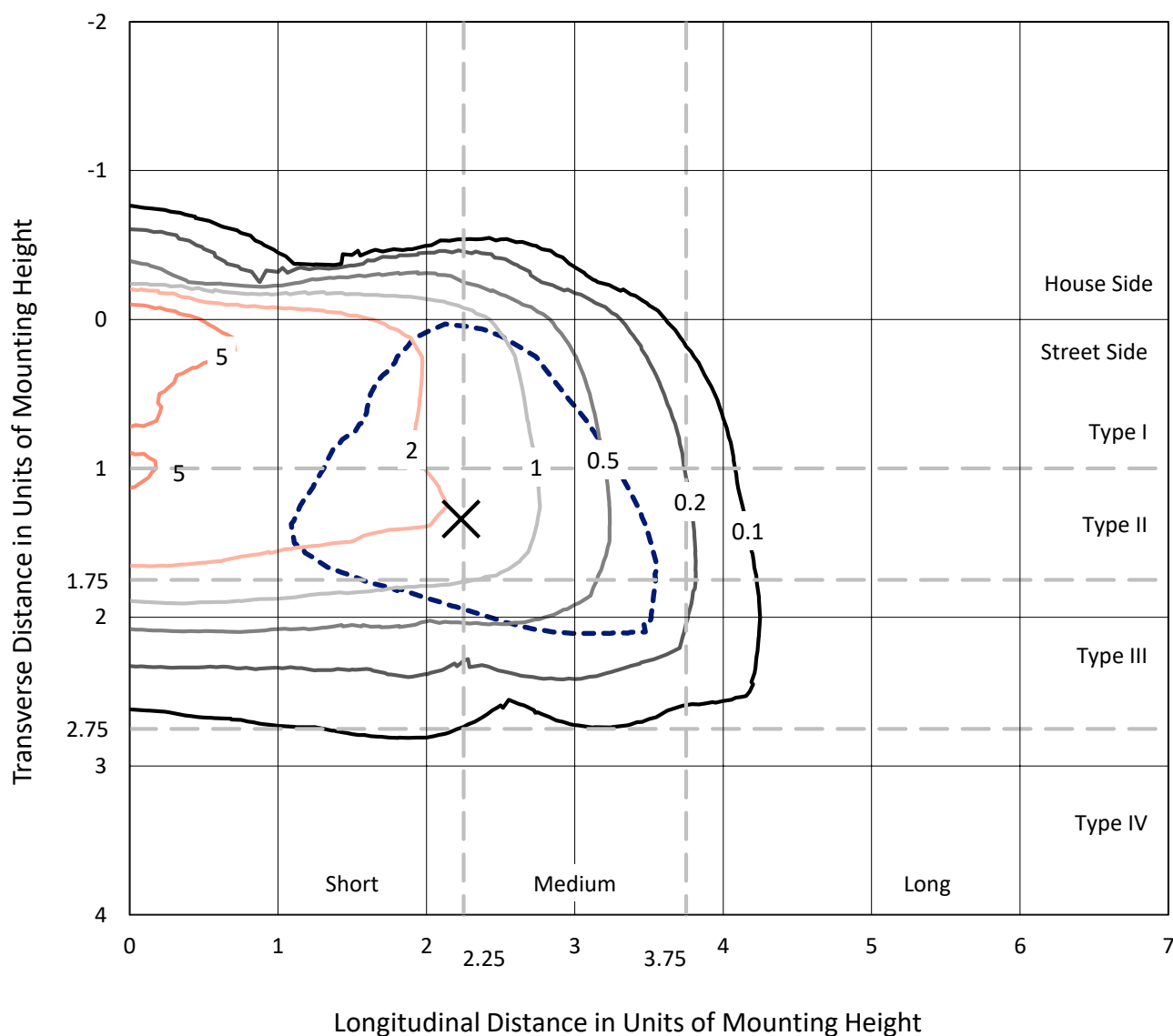
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

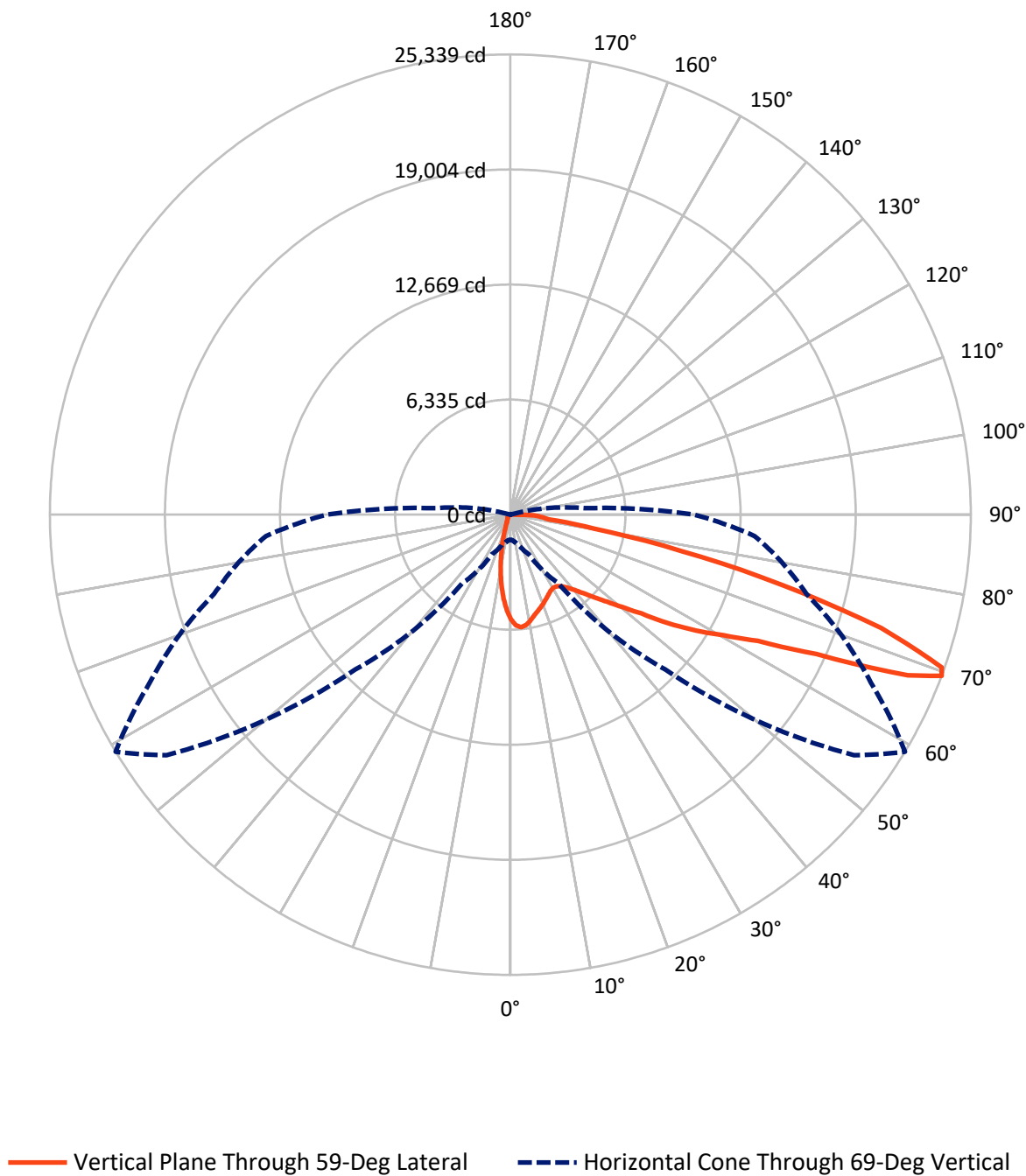


Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1807.9	0.0	1807.9
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	20392.9	0.0	20392.9
	% Fixture	91.9	0.0	91.9
Total	Lumens	22200.8	0.0	22200.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.0	2.1
10°-20°	969.2	4.4
20°-30°	1304.2	5.9
30°-40°	1893.6	8.5
40°-50°	3152.9	14.2
50°-60°	4918.5	22.2
60°-70°	6086.3	27.4
70°-80°	3084.5	13.9
80°-90°	322.7	1.5
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°	22200.8	100.0
0°-180°	22200.8	100.0

Coefficient of Utilization



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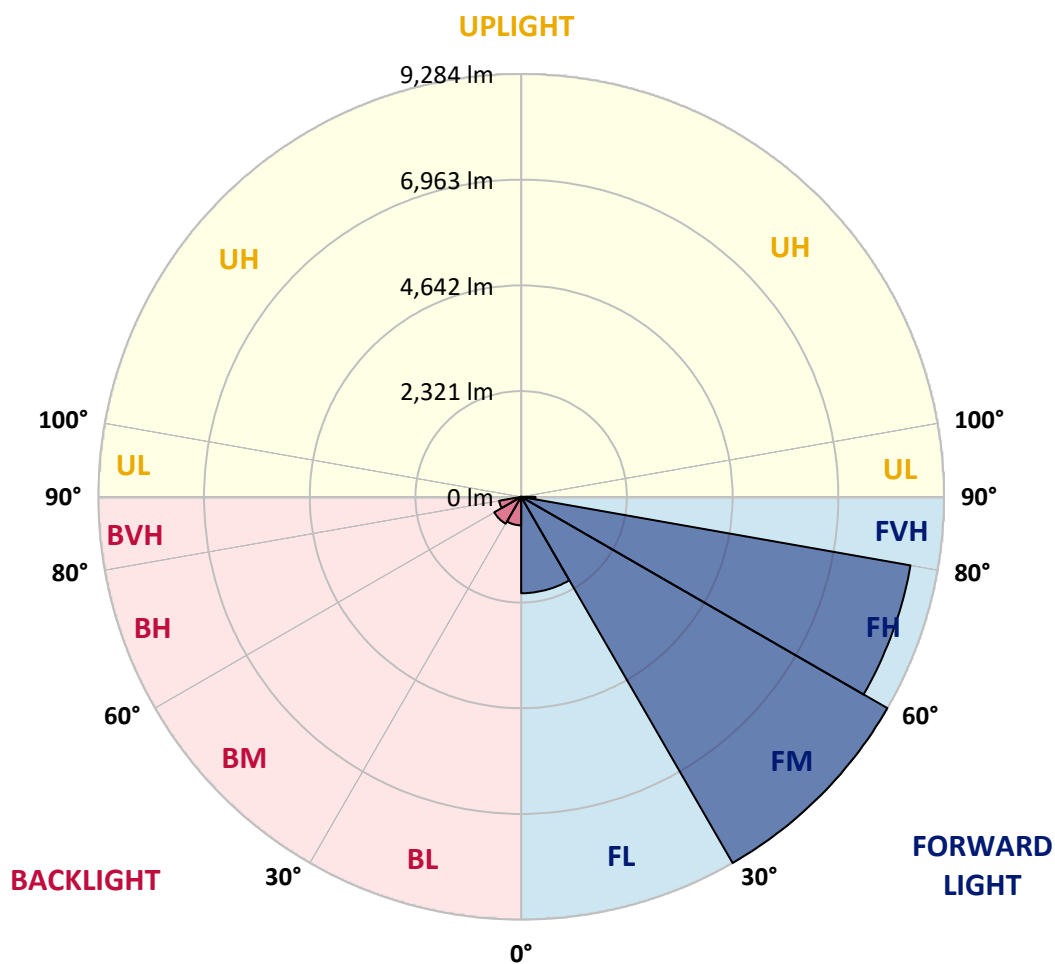
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2116.6	9.5			
FM	(30°-60°)	9283.7	41.8			
FH	(60°-80°)	8679.7	39.1			G4/12000
FVH	(80°-90°)	312.8	1.4			G3/500
BL	(0°-30°)	625.8	2.8	B2/1000		
BM	(30°-60°)	681.2	3.1	B1/1000		
BH	(60°-80°)	491.0	2.2	B1/500		G1/500
BVH	(80°-90°)	9.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5
2.5°	6333.4	6331.1	6303.4	6290.8	6268.0	6220.5	6146.4	6107.6	6044.9	5935.4	5788.7
5°	6275.6	6306.0	6322.0	6323.5	6339.8	6322.0	6255.5	6223.2	6136.5	5960.5	5697.1
7.5°	5884.1	5895.1	5941.9	5981.8	6059.7	6133.8	6157.8	6143.7	6092.4	5904.3	5553.8
10°	5464.9	5475.9	5531.4	5583.8	5689.5	5803.5	5924.0	5949.5	5970.8	5823.7	5415.8
12.5°	5103.0	5114.4	5171.1	5239.9	5363.0	5503.6	5690.7	5732.1	5826.3	5747.3	5305.2
15°	4791.7	4796.7	4852.2	4937.3	5084.4	5265.0	5477.4	5543.9	5688.4	5693.3	5208.7
17.5°	4526.8	4539.4	4573.6	4654.9	4815.7	5039.2	5286.6	5382.0	5551.2	5648.1	5114.4
20°	4364.9	4377.5	4376.3	4421.5	4566.0	4804.3	5095.8	5209.8	5415.8	5601.7	5030.4
22.5°	4333.7	4333.7	4301.1	4294.6	4380.1	4579.7	4897.4	5036.5	5293.8	5581.6	4971.5
25°	4445.5	4440.2	4358.8	4292.3	4296.1	4415.1	4705.1	4870.8	5191.2	5595.3	4940.0
27.5°	4681.5	4675.1	4572.1	4445.5	4343.6	4342.5	4559.5	4737.8	5109.5	5660.6	4952.5
30°	5007.6	5005.4	4893.6	4734.0	4549.6	4380.1	4509.3	4671.3	5056.7	5778.5	4981.4
32.5°	5364.2	5360.4	5276.4	5108.4	4874.6	4549.6	4562.2	4697.9	5071.9	5935.4	5051.7
35°	5742.3	5735.9	5699.4	5552.7	5295.4	4862.1	4735.5	4840.8	5167.3	6170.3	5189.7
37.5°	6151.3	6157.8	6184.0	6043.4	5773.5	5300.3	5025.5	5097.0	5359.2	6489.2	5414.3
40°	6755.3	6754.1	6762.9	6578.2	6318.6	5836.2	5430.7	5453.5	5680.8	6912.2	5756.0
42.5°	7851.1	7774.7	7542.4	7165.8	6904.6	6448.9	5941.9	5917.9	6073.8	7435.6	6234.2
45°	9323.9	9160.5	8558.0	7836.2	7502.1	7139.5	6570.6	6494.2	6593.4	8064.7	6824.4
47.5°	10590.3	10420.8	9568.7	8534.1	8136.1	7794.8	7307.5	7169.6	7202.3	8769.0	7572.5
50°	11021.0	10938.1	10193.9	9141.8	8750.0	8619.6	8162.7	7994.4	7948.0	9583.5	8439.8
52.5°	10871.6	10865.5	10369.5	9536.0	9312.5	9473.3	9238.4	9043.8	8873.1	10442.5	9322.4
55°	10631.8	10663.3	10441.0	9881.1	9873.5	10252.8	10709.7	10547.8	10053.3	11375.2	10083.3
57.5°	9970.4	10104.6	10401.1	10534.1	10842.7	11230.8	11935.1	12030.5	11445.5	12089.4	10714.6
60°	8089.8	8384.7	9353.9	10628.0	12092.1	13058.6	13414.0	13495.3	12587.7	12683.1	11567.2
62.5°	5742.3	6043.4	7272.6	9428.0	12110.7	15460.0	15617.0	15297.0	13845.8	13563.4	13037.3
65°	3047.9	3280.5	4284.7	6805.4	10500.3	16017.6	19469.9	18515.9	16065.1	15294.3	14936.6
67.5°	1559.1	1629.4	2028.9	3330.7	7218.6	14227.4	22923.4	23595.0	19890.3	17011.9	14845.0
69°	1379.7	1421.1	1686.1	2407.8	4622.2	12050.6	23091.8	25338.8	21893.0	16868.6	13490.4
70°	1335.6	1372.1	1613.1	2179.4	3613.1	10105.7	22447.5	25185.7	22404.9	16323.9	12478.6
72.5°	1133.8	1165.0	1436.3	1925.9	2936.5	5016.4	18234.6	21341.8	20105.0	13598.3	9032.4
75°	758.3	861.3	1378.6	1805.4	2731.7	2849.9	12021.7	15422.4	14326.6	9171.9	4705.1
77.5°	182.1	195.7	389.2	1436.3	2498.3	2508.2	6182.9	9587.3	7819.9	3269.1	1112.1
80°	98.1	94.3	109.1	285.1	2326.1	2353.9	2783.4	4653.8	2792.1	542.4	366.4
82.5°	69.2	65.4	70.3	119.3	732.0	2144.1	2013.7	2106.4	1157.4	208.3	164.6
85°	25.1	23.9	38.8	107.9	229.6	1232.6	2068.8	1737.4	937.7	95.4	120.5
87.5°	8.7	7.6	15.2	58.9	70.3	524.9	1276.7	1313.2	369.1	57.8	56.6
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°	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5	5778.5
2.5°	5727.1	5649.2	5506.3	5359.2	5223.5	5060.5	4978.8	4898.6	4864.7	4852.2	4793.3
5°	5561.4	5429.5	5125.8	4820.6	4539.4	4240.6	4043.7	3885.6	3792.5	3747.3	3675.8
7.5°	5349.3	5133.4	4672.4	4201.9	3763.6	3331.8	3011.8	2765.5	2596.0	2514.7	2440.5
10°	5143.3	4856.0	4200.7	3559.1	2963.9	2391.5	1949.5	1629.4	1424.9	1330.7	1270.6
12.5°	4959.0	4586.1	3745.0	2932.7	2185.5	1515.4	1065.8	811.1	684.2	640.1	618.8
15°	4794.4	4337.5	3314.4	2337.5	1480.1	866.2	582.7	496.0	475.9	475.9	473.2
17.5°	4638.6	4093.9	2898.5	1778.8	928.9	529.8	443.2	431.8	431.8	436.7	436.7
20°	4489.2	3861.7	2496.8	1276.7	585.0	420.4	400.6	398.0	400.6	406.7	406.7
22.5°	4361.1	3650.7	2121.6	876.1	434.4	378.9	369.1	365.3	366.4	370.2	372.9
25°	4265.7	3472.5	1767.8	593.7	374.0	345.1	334.1	327.6	322.7	322.7	325.0
27.5°	4205.7	3322.0	1424.9	431.8	336.4	314.0	296.1	286.2	274.8	268.7	271.0
30°	4161.6	3178.7	1103.4	352.7	301.4	278.6	256.2	239.8	223.5	215.9	218.5
32.5°	4145.2	3063.1	824.8	311.3	269.9	244.8	217.0	195.7	178.3	171.8	173.3
35°	4189.3	2971.5	604.0	281.3	244.8	213.2	182.1	158.1	144.4	140.6	141.8
37.5°	4304.9	2922.5	451.9	256.2	222.4	187.0	152.0	129.2	120.5	120.5	121.6
40°	4523.0	2921.3	363.0	238.7	202.2	161.9	125.4	109.1	104.1	106.8	107.9
42.5°	4841.9	2987.9	316.2	222.4	184.7	138.0	104.1	92.7	91.6	94.3	95.4
45°	5277.5	3109.5	291.1	208.3	165.7	115.5	87.8	80.2	80.2	84.0	85.5
47.5°	5811.1	3287.7	269.9	194.6	146.7	96.5	75.3	70.3	71.5	75.3	76.4
50°	6453.9	3512.8	248.6	179.4	133.0	80.2	65.4	61.6	62.7	67.7	69.2
52.5°	7185.9	3815.3	231.1	165.7	115.5	66.5	55.1	52.8	55.1	60.4	61.6
55°	7813.4	4086.3	209.8	154.3	92.7	55.1	45.2	45.2	47.9	54.0	55.1
57.5°	8417.4	4369.9	190.8	133.0	73.0	44.1	37.6	38.8	42.6	49.0	50.2
60°	9303.8	4850.7	168.4	111.7	55.1	35.0	31.5	32.7	37.6	44.1	45.2
62.5°	10808.9	5582.7	145.6	92.7	42.6	27.7	25.1	27.7	33.8	41.4	42.6
65°	12167.3	5880.3	119.3	77.9	32.7	21.3	21.3	25.1	32.7	40.3	41.4
67.5°	11410.2	4949.9	92.7	61.6	25.1	16.3	17.5	23.9	31.5	40.3	41.4
69°	10090.9	4047.5	79.1	49.0	21.3	15.2	16.3	23.9	31.5	38.8	40.3
70°	9062.8	3417.4	70.3	41.4	19.0	15.2	16.3	22.4	31.5	38.8	40.3
72.5°	6070.0	1845.3	56.6	30.0	17.5	13.7	13.7	22.4	30.0	37.6	38.8
75°	2608.5	509.7	45.2	21.3	15.2	12.5	12.5	21.3	28.9	36.5	38.8
77.5°	477.0	129.2	36.5	19.0	15.2	12.5	11.4	20.1	27.7	35.0	36.5
80°	189.7	63.9	28.9	16.3	13.7	11.4	9.9	19.0	26.2	33.8	35.0
82.5°	114.4	36.5	23.9	15.2	13.7	9.9	8.7	16.3	25.1	32.7	33.8
85°	92.7	25.1	19.0	15.2	12.5	9.9	7.6	15.2	22.4	31.5	32.7
87.5°	45.2	17.5	17.5	13.7	12.5	9.9	7.6	13.7	21.3	30.0	31.5
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)