

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: P299750

Luminaire Tested: **GLNA-AF-10-LED-E1-SL2-7030-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-SL2-7030-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28246.3 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 323
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

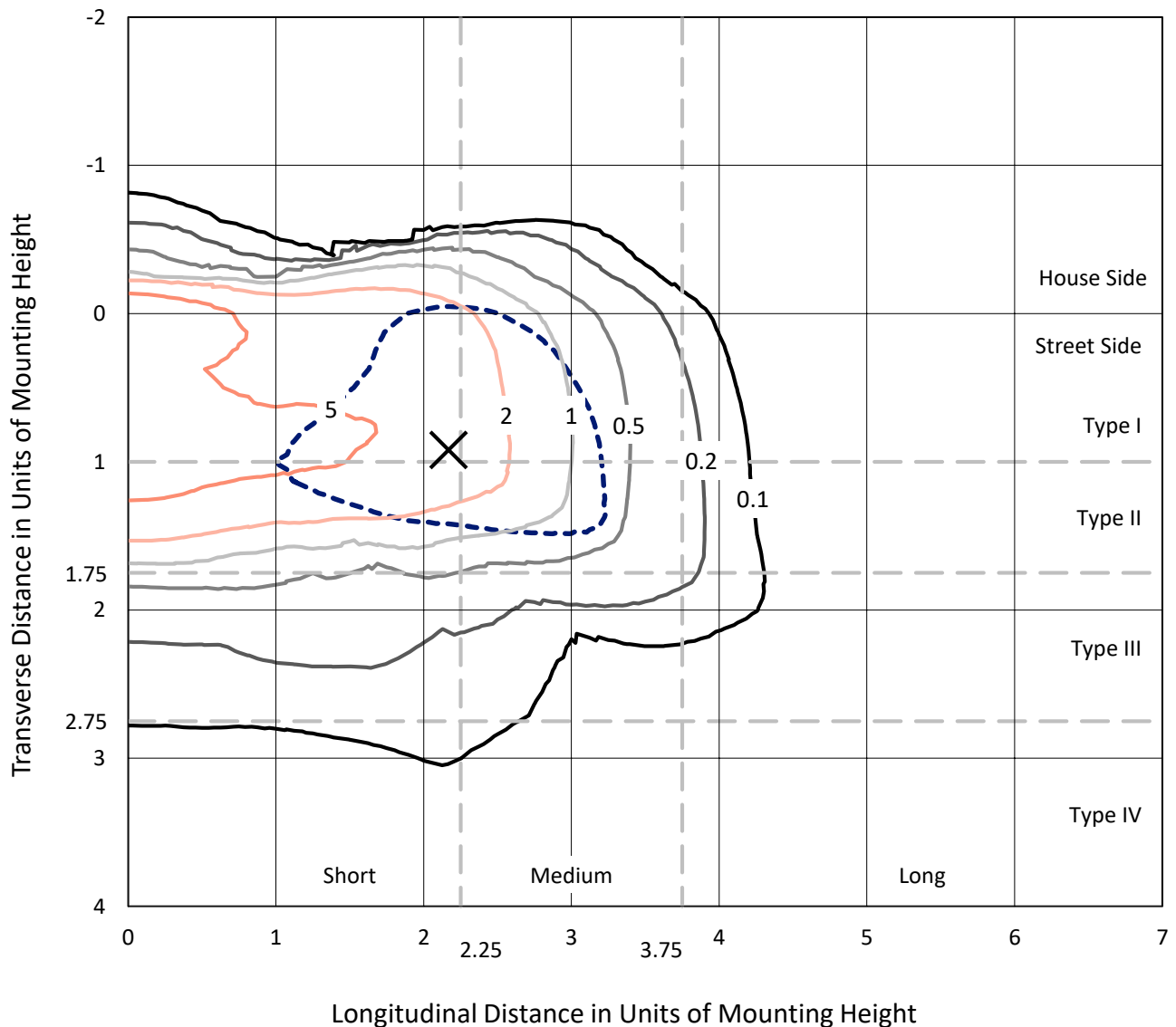


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

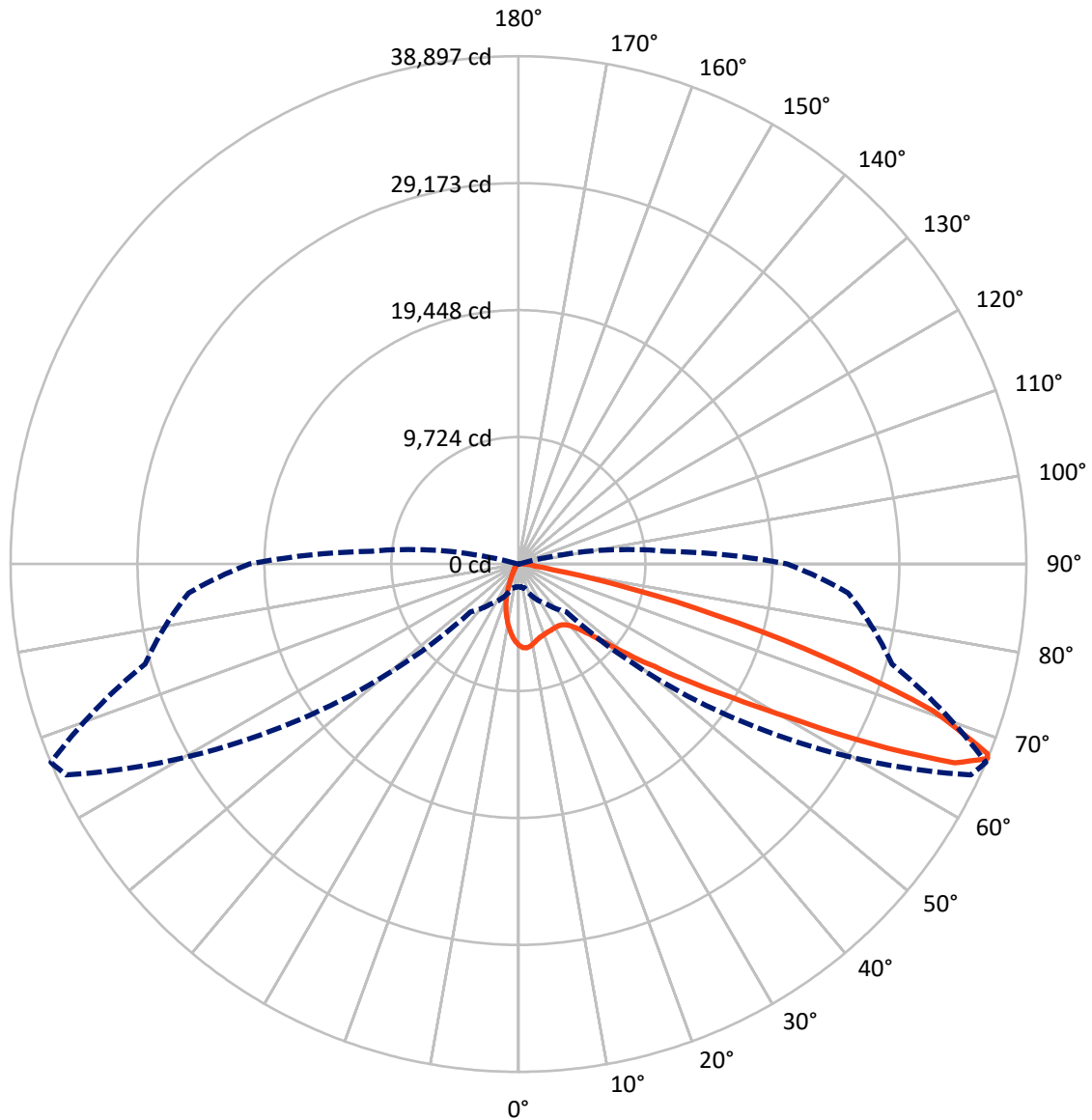


Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2932.8	0.0	2932.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	25313.5	0.0	25313.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	28246.3	0.0	28246.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	506.9	1.8
10°-20°	1078.8	3.8
20°-30°	1568.5	5.6
30°-40°	2446.9	8.7
40°-50°	4334.6	15.3
50°-60°	6859.1	24.3
60°-70°	7856.2	27.8
70°-80°	3258.7	11.5
80°-90°	336.6	1.2
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°	28246.3	100.0
0°-180°	28246.3	100.0



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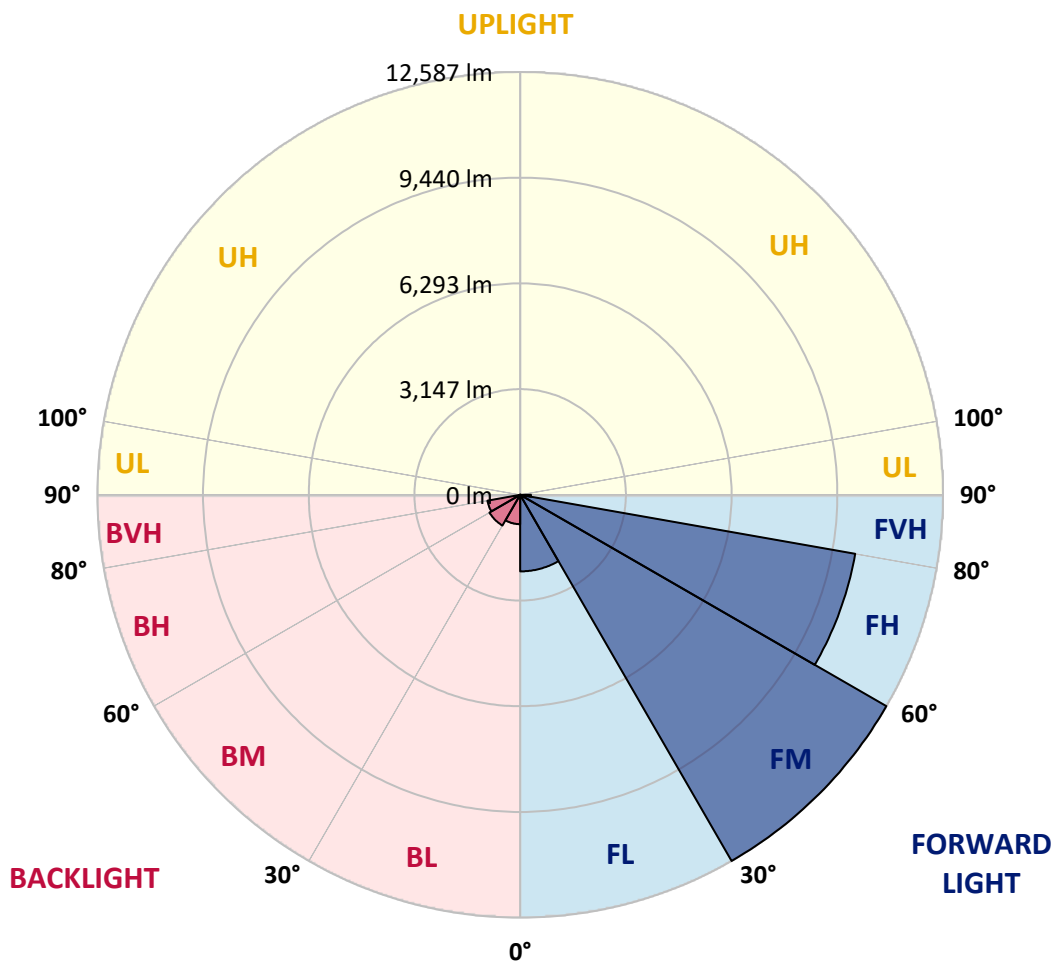
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2279.0	8.1			
FM (30°-60°)	12586.6	44.6			
FH (60°-80°)	10126.4	35.9			G4/12000
FVH (80°-90°)	321.4	1.1			G3/500
BL (0°-30°)	875.2	3.1	B2/1000		
BM (30°-60°)	1054.0	3.7	B2/2500		
BH (60°-80°)	988.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	15.2	0.1			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4
2.5°	6440.2	6453.4	6451.8	6461.7	6484.7	6486.4	6463.3	6418.8	6408.9	6351.3	6250.8
5°	5939.4	5977.3	6000.3	6094.3	6199.7	6326.6	6422.1	6456.7	6451.8	6410.6	6259.0
7.5°	5367.7	5405.6	5431.9	5542.3	5682.4	5899.8	6148.6	6352.9	6371.0	6415.5	6252.4
10°	4987.1	4993.7	5029.9	5135.4	5282.0	5504.4	5801.0	6158.5	6212.9	6376.0	6235.9
12.5°	4674.1	4679.0	4726.8	4840.5	4997.0	5221.1	5532.4	5946.0	6030.0	6326.6	6232.6
15°	4451.7	4469.8	4512.6	4631.2	4797.6	5020.1	5339.7	5789.5	5890.0	6308.4	6262.3
17.5°	4377.5	4397.3	4410.5	4496.1	4647.7	4865.2	5193.0	5687.3	5801.0	6318.3	6320.0
20°	4454.9	4469.8	4440.1	4461.5	4555.4	4749.9	5069.5	5600.0	5735.1	6329.9	6394.1
22.5°	4743.3	4749.9	4669.1	4575.2	4558.7	4665.8	4972.3	5530.8	5675.8	6361.2	6481.4
25°	5237.5	5226.0	5094.2	4891.5	4700.4	4651.0	4914.6	5488.0	5646.1	6394.1	6572.0
27.5°	5833.9	5850.4	5669.2	5374.3	5010.2	4749.9	4906.4	5469.8	5632.9	6417.2	6651.1
30°	6558.9	6581.9	6374.3	6003.6	5481.4	4993.7	4982.2	5466.5	5624.7	6402.3	6657.7
32.5°	7298.6	7326.6	7163.5	6781.3	6110.7	5402.3	5153.5	5502.8	5641.2	6351.3	6619.8
35°	8072.9	8112.5	8003.8	7675.9	6964.2	5992.1	5455.0	5613.2	5718.6	6346.3	6581.9
37.5°	9142.2	9178.4	8974.2	8626.5	7997.2	6782.9	5939.4	5820.8	5901.5	6425.4	6591.8
40°	10738.7	10733.7	10206.5	9674.4	9132.3	7787.9	6619.8	6196.4	6237.6	6664.3	6713.7
42.5°	12478.5	12470.2	11690.9	10882.0	10392.7	9025.2	7514.4	6845.5	6817.5	7104.2	7030.1
45°	13819.6	13817.9	13182.0	12270.9	11910.1	10445.4	8671.0	7748.4	7705.5	7819.2	7613.3
47.5°	14391.3	14401.2	14081.5	13440.6	13592.2	12366.4	10129.1	9056.5	8992.3	8946.1	8633.1
50°	13946.4	13966.2	13992.6	13867.3	14826.2	14948.1	12084.7	10900.1	10868.8	10662.9	10173.6
52.5°	12493.3	12593.8	12903.5	13300.6	15254.6	17426.0	15150.8	13190.2	13022.2	12803.0	12264.3
55°	10045.1	10155.4	10743.6	11707.4	14617.0	19053.8	19447.6	16142.6	15862.5	15208.4	14430.8
57.5°	6647.8	6819.2	7672.6	8898.4	12765.1	19315.8	23734.5	20240.0	19264.7	17473.8	16597.3
60°	3662.5	3827.2	4753.2	5863.6	9219.6	18020.8	26617.7	25574.8	23851.4	20006.1	19228.4
62.5°	2255.5	2344.5	3028.2	4061.2	5529.1	14223.2	27214.1	32278.6	30283.4	23266.6	22406.6
65°	1795.8	1833.7	2168.2	3319.8	3964.0	8460.1	25288.1	37389.3	36723.7	27214.1	25251.9
67°	1743.1	1757.9	1916.1	2850.2	3736.6	5186.5	21185.7	38221.3	38896.8	29603.0	25340.8
67.5°	1754.6	1771.1	1921.0	2720.1	3730.0	4766.3	19772.1	37893.4	38746.9	29792.5	24947.1
70°	1692.0	1743.1	2199.5	2718.4	3547.2	3960.7	11840.9	32832.2	33720.2	27682.0	21167.6
72.5°	599.7	603.0	950.6	2199.5	3856.9	4003.5	5946.0	24068.9	24726.3	21175.8	15261.2
75°	355.9	303.1	316.3	626.1	3685.5	3888.2	3430.2	15379.8	15625.3	12134.1	7728.6
77.5°	245.5	214.2	220.8	276.8	1403.7	3833.8	2725.0	8020.2	7758.3	4255.6	1645.9
80°	140.0	123.6	131.8	242.2	510.7	3576.8	2570.2	3252.2	2772.8	721.6	454.7
82.5°	74.1	62.6	75.8	199.4	355.9	2229.1	2575.1	1571.8	1245.5	243.8	309.7
85°	26.4	21.4	36.2	136.7	237.2	683.7	2387.3	1321.3	1038.0	118.6	235.6
87.5°	4.9	4.9	14.8	56.0	95.6	209.2	1411.9	784.2	525.6	70.8	161.5
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°	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4	6229.4
2.5°	6209.6	6138.7	6043.2	5926.2	5787.8	5665.9	5575.3	5481.4	5461.6	5428.6	5423.7
5°	6168.4	6046.5	5809.2	5537.4	5247.4	4985.5	4772.9	4583.5	4499.4	4426.9	4418.7
7.5°	6107.4	5924.6	5520.9	5082.7	4629.6	4217.7	3868.4	3621.3	3393.9	3285.2	3268.7
10°	6036.6	5774.6	5196.3	4588.4	3962.3	3380.8	2861.8	2426.8	2163.2	2006.7	1986.9
12.5°	5970.7	5628.0	4865.2	4076.0	3244.0	2466.4	1799.1	1383.9	1107.1	995.1	981.9
15°	5939.4	5509.4	4555.4	3552.1	2492.7	1570.1	983.6	761.2	670.5	644.2	642.5
17.5°	5936.1	5408.9	4252.3	3010.1	1746.4	912.7	640.9	584.9	566.8	560.2	560.2
20°	5934.4	5313.3	3949.2	2448.2	1108.8	607.9	533.8	520.6	507.4	499.2	499.2
22.5°	5952.6	5227.6	3632.8	1874.9	698.6	492.6	469.5	456.4	439.9	428.4	426.7
25°	5970.7	5161.7	3309.9	1334.5	505.8	428.4	405.3	387.2	364.1	349.3	347.6
27.5°	5974.0	5079.4	2963.9	893.0	423.4	374.0	344.3	316.3	290.0	275.1	273.5
30°	5924.6	4941.0	2580.0	603.0	374.0	324.6	285.0	255.4	230.7	219.1	219.1
32.5°	5827.4	4769.6	2158.3	454.7	332.8	278.4	235.6	207.6	191.1	186.2	184.5
35°	5740.0	4585.1	1725.0	385.5	298.2	235.6	192.8	174.6	164.8	163.1	161.5
37.5°	5689.0	4436.8	1318.0	349.3	265.3	197.7	163.1	149.9	145.0	141.7	143.3
40°	5728.5	4313.3	973.7	319.6	232.3	164.8	138.4	131.8	126.9	125.2	125.2
42.5°	5901.5	4291.8	723.3	293.3	201.0	136.7	120.3	115.3	112.0	110.4	112.0
45°	6356.2	4423.6	561.8	268.5	169.7	115.3	102.1	100.5	98.9	98.9	98.9
47.5°	7039.9	4695.5	467.9	240.5	141.7	98.9	89.0	87.3	85.7	87.3	87.3
50°	8198.2	5193.0	418.5	212.5	117.0	84.0	75.8	75.8	75.8	75.8	77.4
52.5°	9959.4	6171.7	385.5	184.5	95.6	70.8	64.3	64.3	65.9	65.9	67.5
55°	11921.6	7469.9	355.9	156.5	80.7	59.3	52.7	54.4	56.0	57.7	57.7
57.5°	14050.2	8908.3	331.2	128.5	69.2	47.8	44.5	46.1	47.8	51.1	51.1
60°	16618.7	10465.2	294.9	100.5	57.7	37.9	34.6	37.9	42.8	46.1	47.8
62.5°	19439.3	11971.0	248.8	79.1	47.8	29.7	28.0	34.6	41.2	44.5	46.1
65°	21367.0	12443.9	191.1	64.3	36.2	21.4	23.1	31.3	39.5	44.5	44.5
67°	20586.0	11282.4	156.5	54.4	29.7	16.5	21.4	31.3	39.5	42.8	44.5
67.5°	20044.0	10827.6	149.9	52.7	28.0	16.5	21.4	31.3	39.5	44.5	44.5
70°	16309.0	8133.9	125.2	39.5	23.1	14.8	18.1	29.7	37.9	42.8	42.8
72.5°	11331.8	5015.1	112.0	28.0	19.8	13.2	16.5	28.0	36.2	41.2	42.8
75°	5387.5	1815.6	95.6	21.4	18.1	11.5	14.8	28.0	36.2	41.2	41.2
77.5°	1098.9	421.8	77.4	18.1	14.8	11.5	13.2	26.4	34.6	39.5	39.5
80°	360.8	163.1	57.7	16.5	14.8	11.5	13.2	24.7	34.6	37.9	39.5
82.5°	260.3	82.4	37.9	16.5	14.8	11.5	11.5	24.7	33.0	37.9	37.9
85°	199.4	57.7	24.7	16.5	14.8	11.5	11.5	23.1	31.3	36.2	36.2
87.5°	131.8	23.1	19.8	16.5	14.8	11.5	11.5	23.1	29.7	34.6	36.2
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)