

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-06-LED-E1-SL3-7030-800-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-06-LED-E1-SL3-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 3000K CCT 800mA 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: 21590 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 249  
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

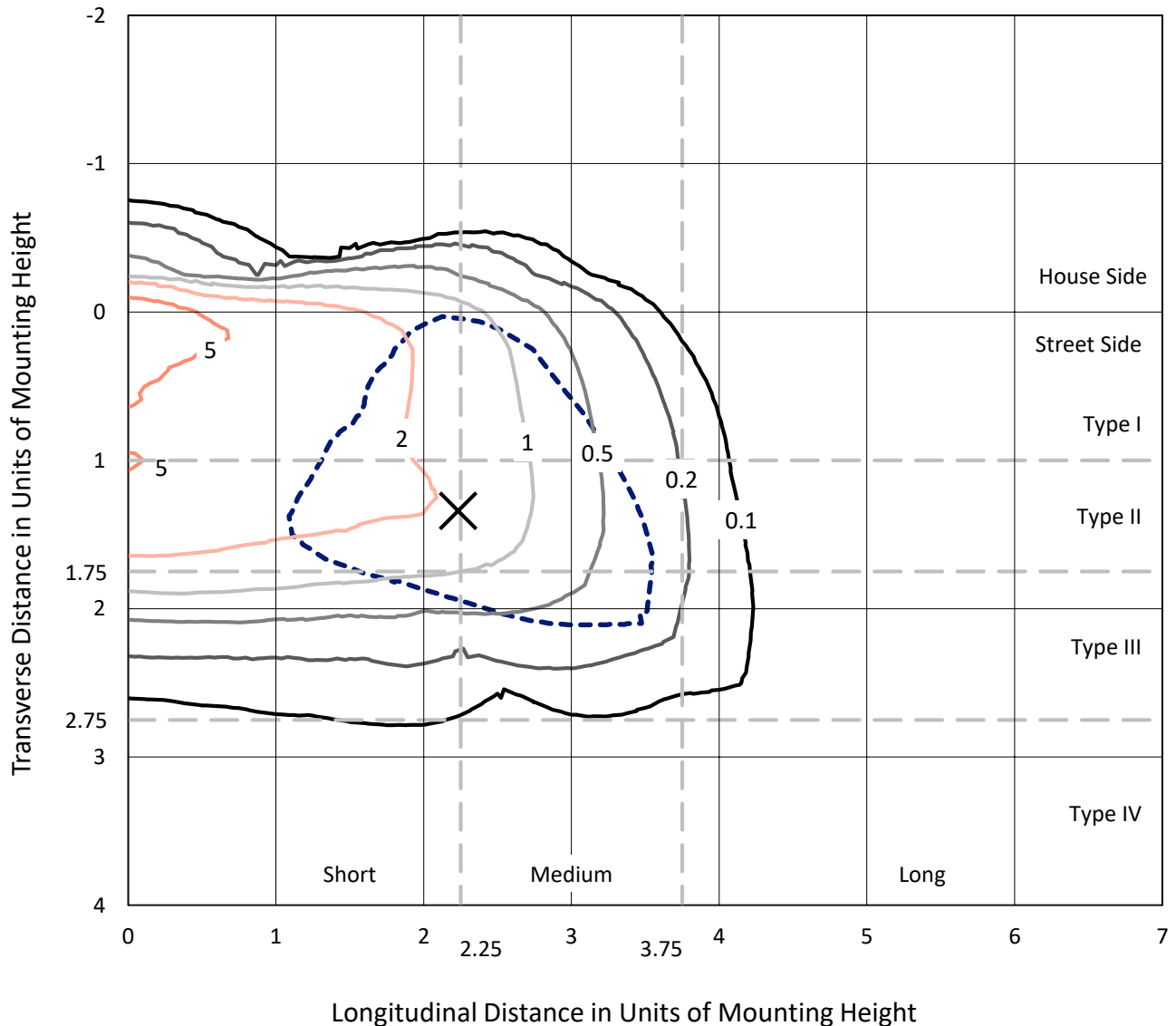


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

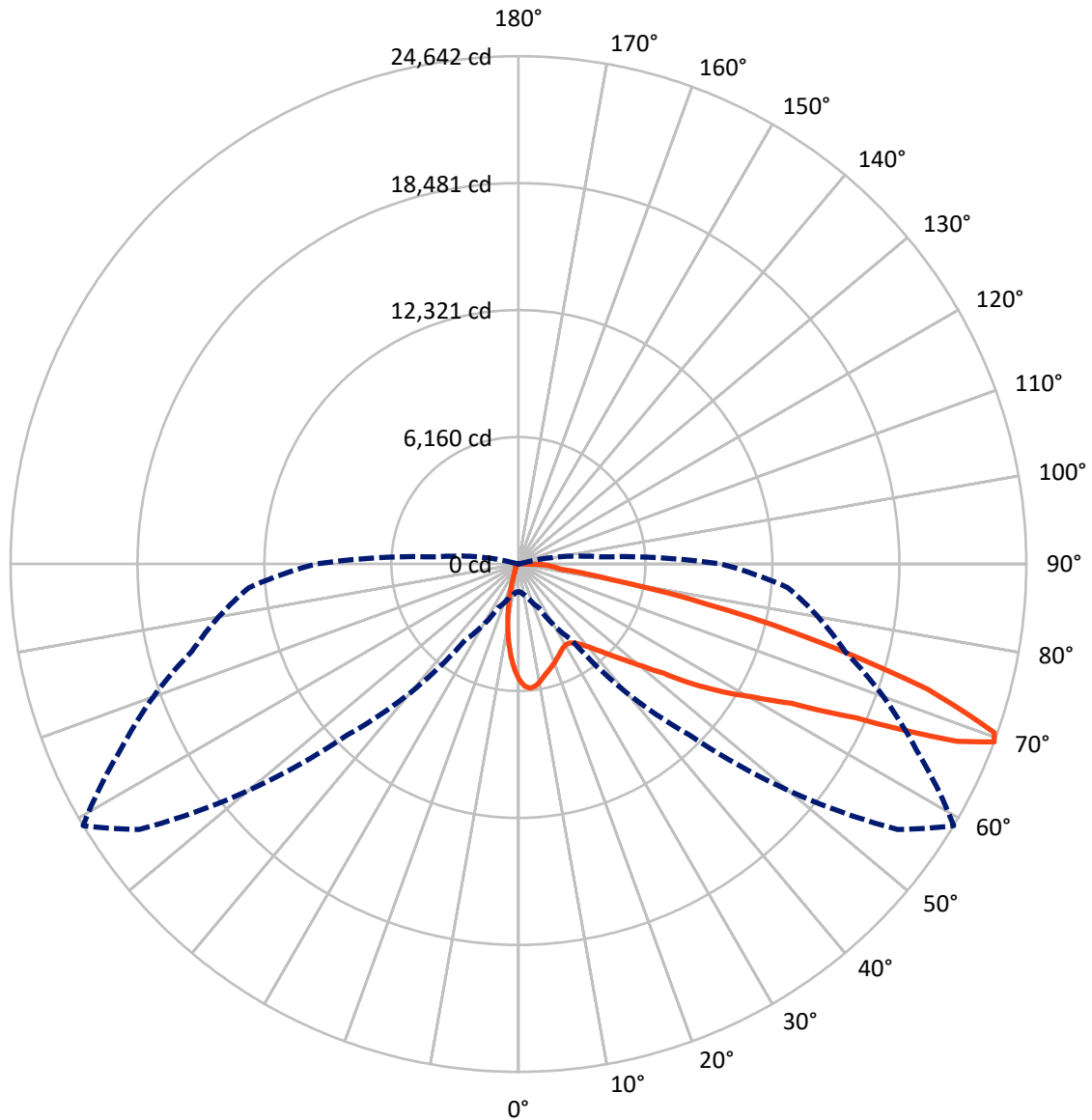


Based on 25 foot mounting height. Maximum calculated value = 9 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1758.2	0.0	1758.2
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	19831.8	0.0	19831.8
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	21590.0	0.0	21590.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	456.1	2.1
10°-20°	942.5	4.4
20°-30°	1268.3	5.9
30°-40°	1841.5	8.5
40°-50°	3066.2	14.2
50°-60°	4783.2	22.2
60°-70°	5918.8	27.4
70°-80°	2999.6	13.9
80°-90°	313.9	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°	21590.0	100.0
0°-180°	21590.0	100.0



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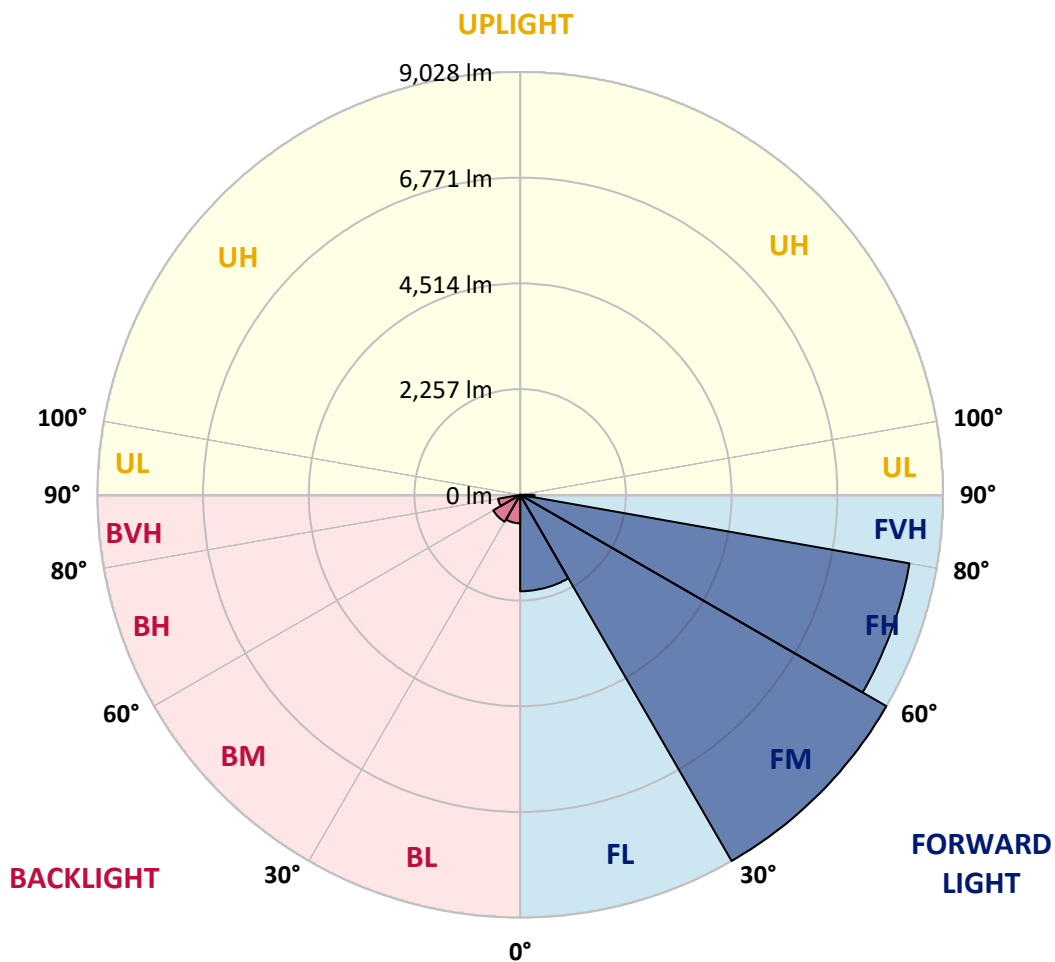
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2058.4	9.5			
FM	(30°-60°)	9028.3	41.8			
FH	(60°-80°)	8440.9	39.1			G4/12000
FVH	(80°-90°)	304.2	1.4			G3/500
BL	(0°-30°)	608.6	2.8	B2/1000		
BM	(30°-60°)	662.5	3.1	B1/1000		
BH	(60°-80°)	477.5	2.2	B1/500		G1/500
BVH	(80°-90°)	9.7	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°	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5
2.5°	6159.1	6156.9	6129.9	6117.7	6095.5	6049.3	5977.3	5939.6	5878.6	5772.1	5629.4
5°	6102.9	6132.5	6148.0	6149.5	6165.4	6148.0	6083.4	6051.9	5967.7	5796.5	5540.4
7.5°	5722.2	5732.9	5778.4	5817.2	5893.0	5965.1	5988.4	5974.7	5924.8	5741.8	5401.0
10°	5314.5	5325.2	5379.2	5430.2	5533.0	5643.9	5761.0	5785.8	5806.5	5663.5	5266.8
12.5°	4962.6	4973.7	5028.8	5095.7	5215.5	5352.2	5534.1	5574.4	5666.0	5589.2	5159.3
15°	4659.9	4664.7	4718.7	4801.5	4944.5	5120.1	5326.7	5391.4	5531.9	5536.7	5065.4
17.5°	4402.3	4414.5	4447.7	4526.8	4683.2	4900.5	5141.2	5233.9	5398.4	5492.7	4973.7
20°	4244.8	4257.0	4255.9	4299.9	4440.4	4672.1	4955.6	5066.5	5266.8	5447.6	4892.0
22.5°	4214.5	4214.5	4182.7	4176.4	4259.6	4453.7	4762.7	4898.0	5148.2	5428.0	4834.7
25°	4323.2	4318.0	4238.9	4174.2	4177.9	4293.6	4575.6	4736.8	5048.4	5441.3	4804.1
27.5°	4552.7	4546.4	4446.3	4323.2	4224.1	4223.0	4434.1	4607.4	4968.9	5504.9	4816.3
30°	4869.9	4867.6	4759.0	4603.7	4424.5	4259.6	4385.3	4542.7	4917.5	5619.5	4844.4
32.5°	5216.6	5212.9	5131.2	4967.8	4740.5	4424.5	4436.7	4568.6	4932.3	5772.1	4912.7
35°	5584.4	5578.1	5542.6	5399.9	5149.7	4728.3	4605.2	4707.6	5025.1	6000.6	5046.9
37.5°	5982.1	5988.4	6013.9	5877.1	5614.7	5154.5	4887.2	4956.7	5211.8	6310.7	5265.4
40°	6569.4	6568.3	6576.8	6397.2	6144.7	5675.7	5281.3	5303.4	5524.5	6722.1	5597.7
42.5°	7635.1	7560.8	7334.9	6968.6	6714.7	6271.5	5778.4	5755.1	5906.7	7231.0	6062.7
45°	9067.4	8908.4	8322.6	7620.6	7295.7	6943.1	6389.8	6315.5	6412.0	7842.8	6636.7
47.5°	10299.0	10134.1	9305.4	8299.3	7912.3	7580.3	7106.5	6972.3	7004.1	8527.7	7364.1
50°	10717.8	10637.2	9913.4	8890.3	8509.2	8382.4	7938.1	7774.4	7729.3	9319.8	8207.6
52.5°	10572.5	10566.6	10084.2	9273.6	9056.3	9212.6	8984.2	8794.9	8629.0	10155.2	9065.9
55°	10339.3	10369.9	10153.7	9609.2	9601.8	9970.7	10415.0	10257.6	9776.7	11062.3	9805.9
57.5°	9696.1	9826.6	10114.9	10244.3	10544.4	10921.8	11606.7	11699.5	11130.6	11756.8	10419.8
60°	7867.2	8154.0	9096.6	10335.6	11759.4	12699.3	13044.9	13124.0	12241.4	12334.1	11248.9
62.5°	5584.4	5877.1	7072.5	9168.6	11777.5	15034.7	15187.3	14876.1	13464.8	13190.2	12678.6
65°	2964.1	3190.3	4166.8	6618.2	10211.4	15576.9	18934.2	18006.5	15623.1	14873.5	14525.7
67.5°	1516.2	1584.6	1973.1	3239.1	7020.0	13835.9	22292.7	22945.8	19343.0	16543.8	14436.6
69°	1341.8	1382.0	1639.7	2341.6	4495.1	11719.1	22456.4	24641.7	21290.6	16404.5	13119.2
70°	1298.9	1334.4	1568.7	2119.5	3513.7	9827.7	21829.9	24492.7	21788.5	15874.8	12135.3
72.5°	1102.6	1132.9	1396.8	1872.9	2855.8	4878.4	17732.9	20754.7	19551.9	13224.2	8783.9
75°	737.4	837.6	1340.6	1755.7	2656.5	2771.5	11691.0	14998.1	13932.4	8919.5	4575.6
77.5°	177.1	190.4	378.5	1396.8	2429.6	2439.2	6012.8	9323.5	7604.7	3179.2	1081.5
80°	95.4	91.7	106.1	277.2	2262.1	2289.1	2706.8	4525.7	2715.3	527.5	356.3
82.5°	67.3	63.6	68.4	116.1	711.9	2085.1	1958.3	2048.5	1125.5	202.6	160.0
85°	24.4	23.3	37.7	105.0	223.3	1198.7	2011.9	1689.6	911.9	92.8	117.2
87.5°	8.5	7.4	14.8	57.3	68.4	510.5	1241.6	1277.1	358.9	56.2	55.1
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°	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5	5619.5
2.5°	5569.6	5493.8	5354.8	5211.8	5079.8	4921.2	4841.8	4763.8	4730.9	4718.7	4661.4
5°	5408.4	5280.1	4984.8	4688.0	4414.5	4123.9	3932.5	3778.7	3688.2	3644.2	3574.7
7.5°	5202.2	4992.2	4543.8	4086.2	3660.1	3240.2	2928.9	2689.4	2524.6	2445.5	2373.4
10°	5001.8	4722.4	4085.1	3461.2	2882.4	2325.7	1895.8	1584.6	1385.7	1294.1	1235.7
12.5°	4822.5	4459.9	3642.0	2852.1	2125.4	1473.7	1036.4	788.8	665.3	622.5	601.8
15°	4662.5	4218.2	3223.2	2273.2	1439.3	842.4	566.6	482.4	462.8	462.8	460.2
17.5°	4510.9	3981.3	2818.8	1729.9	903.4	515.3	431.0	419.9	419.9	424.7	424.7
20°	4365.7	3755.4	2428.1	1241.6	568.9	408.8	389.6	387.0	389.6	395.5	395.5
22.5°	4241.1	3550.3	2063.3	852.0	422.5	368.5	358.9	355.2	356.3	360.0	362.6
25°	4148.3	3376.9	1719.1	577.4	363.7	335.6	324.9	318.6	313.8	313.8	316.0
27.5°	4089.9	3230.6	1385.7	419.9	327.1	305.3	287.9	278.3	267.2	261.3	263.5
30°	4047.1	3091.2	1073.0	343.0	293.1	270.9	249.1	233.2	217.3	209.9	212.5
32.5°	4031.2	2978.8	802.1	302.7	262.4	238.0	211.1	190.4	173.4	167.1	168.6
35°	4074.0	2889.8	587.3	273.5	238.0	207.4	177.1	153.8	140.5	136.8	137.9
37.5°	4186.4	2842.1	439.5	249.1	216.2	181.9	147.9	125.7	117.2	117.2	118.3
40°	4398.6	2841.0	353.0	232.1	196.6	157.5	122.0	106.1	101.3	103.9	105.0
42.5°	4708.7	2905.7	307.5	216.2	179.6	134.2	101.3	90.2	89.1	91.7	92.8
45°	5132.3	3023.9	283.1	202.6	161.2	112.4	85.4	78.0	78.0	81.7	83.2
47.5°	5651.3	3197.3	262.4	189.2	142.7	93.9	73.2	68.4	69.5	73.2	74.3
50°	6276.3	3416.1	241.7	174.5	129.4	78.0	63.6	59.9	61.0	65.8	67.3
52.5°	6988.2	3710.3	224.7	161.2	112.4	64.7	53.6	51.4	53.6	58.8	59.9
55°	7598.5	3973.9	204.0	150.1	90.2	53.6	44.0	44.0	46.6	52.5	53.6
57.5°	8185.8	4249.6	185.6	129.4	71.0	42.9	36.6	37.7	41.4	47.7	48.8
60°	9047.8	4717.2	163.7	108.7	53.6	34.0	30.7	31.8	36.6	42.9	44.0
62.5°	10511.5	5429.1	141.6	90.2	41.4	27.0	24.4	27.0	32.9	40.3	41.4
65°	11832.6	5718.5	116.1	75.8	31.8	20.7	20.7	24.4	31.8	39.2	40.3
67.5°	11096.3	4813.7	90.2	59.9	24.4	15.9	17.0	23.3	30.7	39.2	40.3
69°	9813.3	3936.2	76.9	47.7	20.7	14.8	15.9	23.3	30.7	37.7	39.2
70°	8813.4	3323.3	68.4	40.3	18.5	14.8	15.9	21.8	30.7	37.7	39.2
72.5°	5903.0	1794.5	55.1	29.2	17.0	13.3	13.3	21.8	29.2	36.6	37.7
75°	2536.8	495.7	44.0	20.7	14.8	12.2	12.2	20.7	28.1	35.5	37.7
77.5°	463.9	125.7	35.5	18.5	14.8	12.2	11.1	19.6	27.0	34.0	35.5
80°	184.4	62.1	28.1	15.9	13.3	11.1	9.6	18.5	25.5	32.9	34.0
82.5°	111.3	35.5	23.3	14.8	13.3	9.6	8.5	15.9	24.4	31.8	32.9
85°	90.2	24.4	18.5	14.8	12.2	9.6	7.4	14.8	21.8	30.7	31.8
87.5°	44.0	17.0	17.0	13.3	12.2	9.6	7.4	13.3	20.7	29.2	30.7
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)