

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: P191997

Luminaire Tested: **GLEON-AF-09-LED-E1-SL4-7050-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191997  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-09-LED-E1-SL4-7050-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28456 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5

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

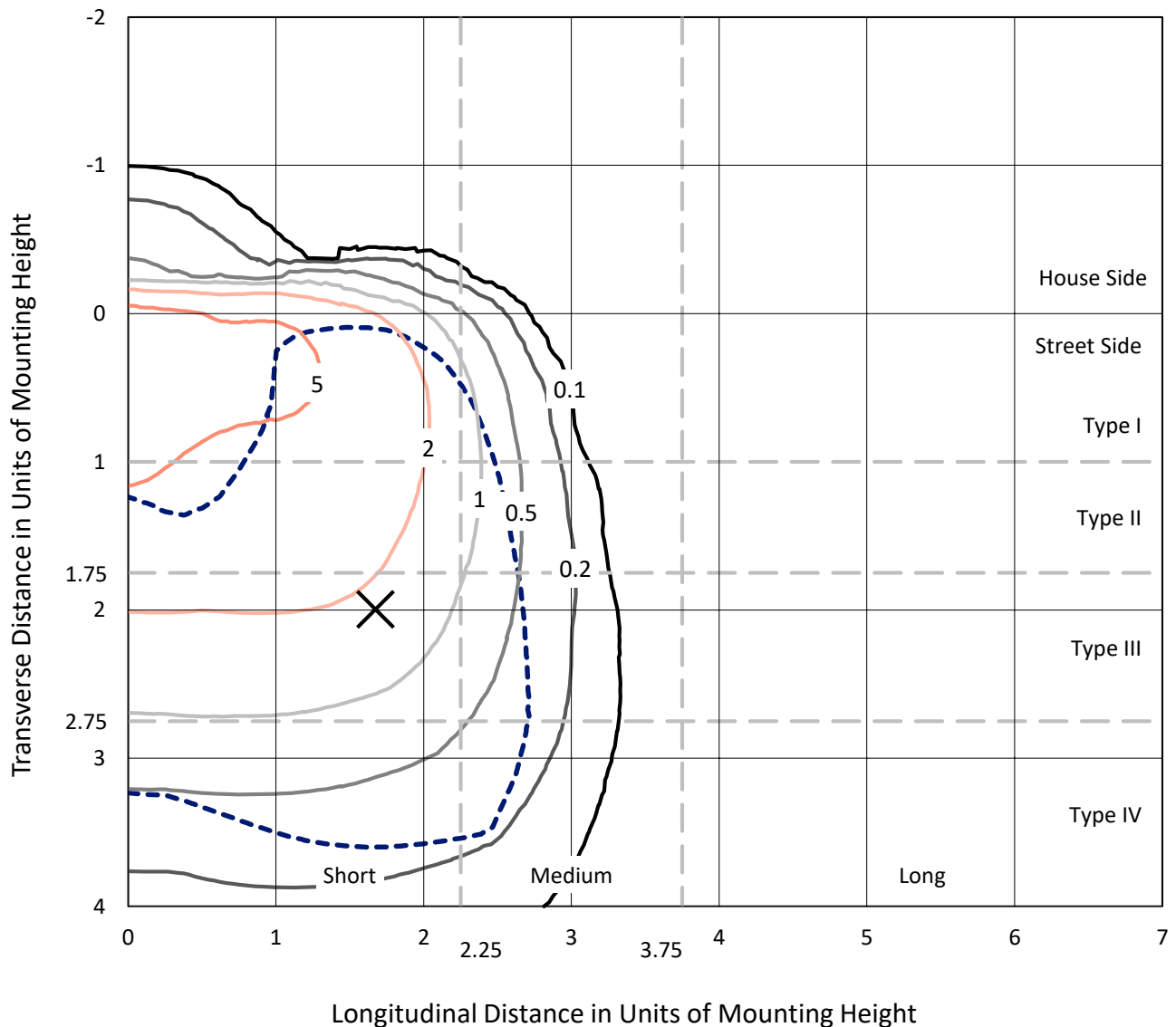


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

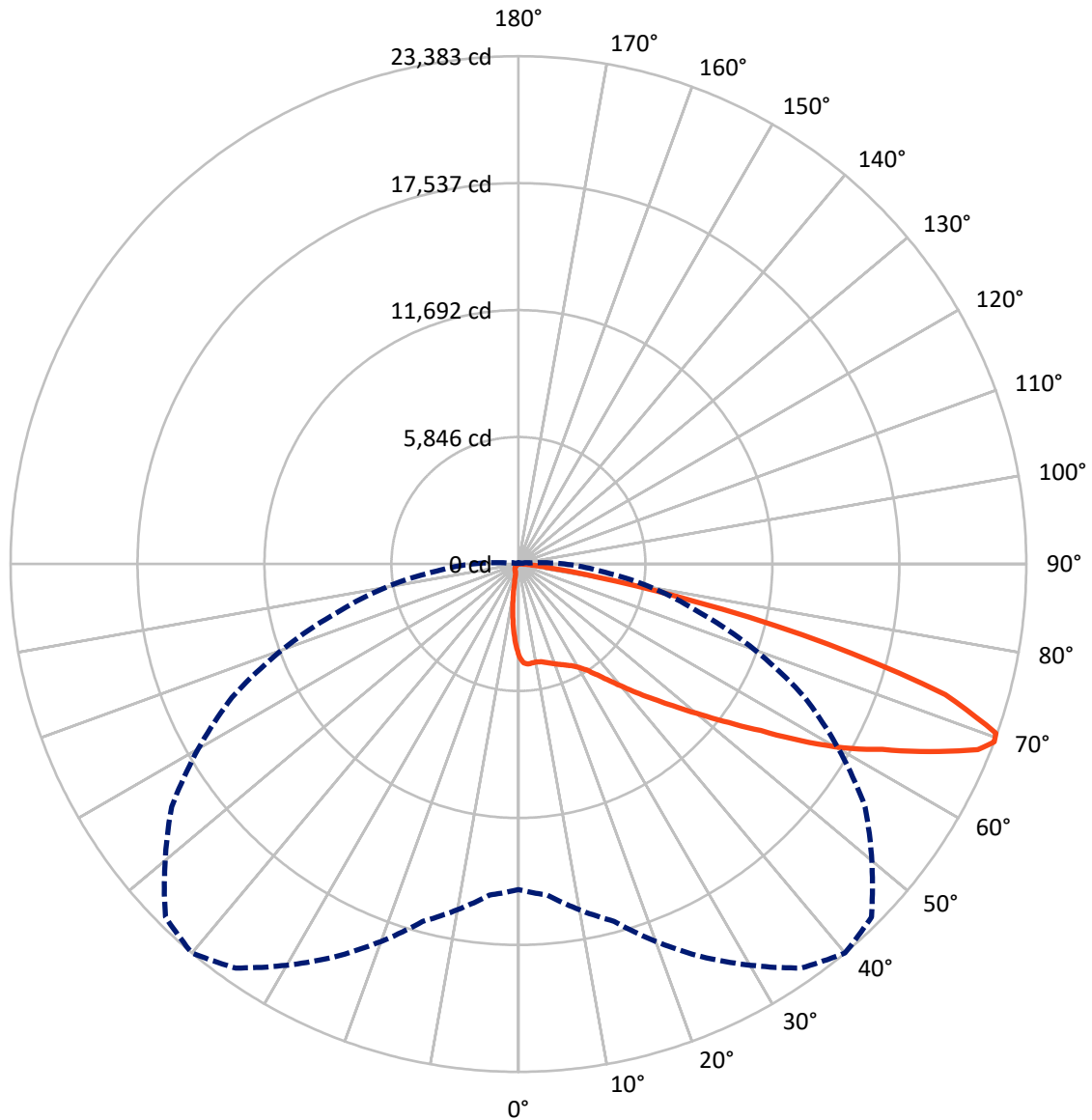


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1664.8	0.0	1664.8
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	26791.2	0.0	26791.2
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	28456.0	0.0	28456.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	344.7	1.2
10°-20°	847.7	3.0
20°-30°	1427.8	5.0
30°-40°	2337.4	8.2
40°-50°	4047.1	14.2
50°-60°	6374.6	22.4
60°-70°	8325.0	29.3
70°-80°	4287.8	15.1
80°-90°	463.8	1.6
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°	28456.0	100.0
0°-180°	28456.0	100.0

**Coefficient of Utilization**



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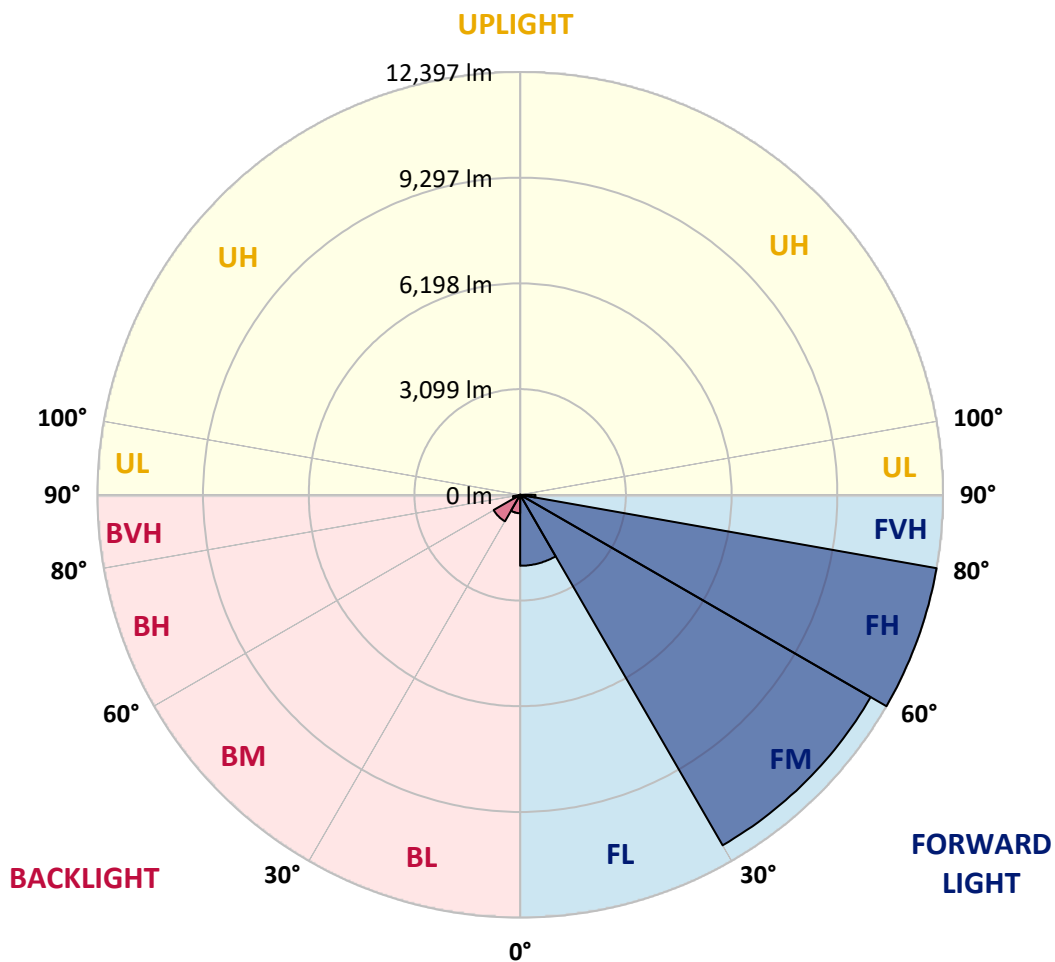
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2080.9	7.3			
FM	(30°-60°)	11864.4	41.7			
FH	(60°-80°)	12396.6	43.6			G5
FVH	(80°-90°)	449.2	1.6			G3/500
BL	(0°-30°)	539.3	1.9	B2/1000		
BM	(30°-60°)	894.8	3.1	B1/1000		
BH	(60°-80°)	216.2	0.8	B1/500		G1/500
BVH	(80°-90°)	14.6	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-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5
2.5°	4668.2	4642.7	4627.5	4607.2	4581.8	4559.7	4551.3	4488.6	4429.3	4348.0	4254.9
5°	4754.5	4746.1	4719.0	4691.9	4661.4	4627.5	4608.9	4534.3	4449.6	4331.1	4168.5
7.5°	4763.0	4752.8	4719.0	4681.7	4639.4	4598.7	4566.5	4492.0	4414.1	4293.8	4095.6
10°	4749.5	4737.6	4712.2	4671.5	4619.0	4580.1	4547.9	4476.7	4410.7	4302.3	4082.1
12.5°	4734.2	4722.4	4710.5	4690.2	4644.4	4617.3	4590.2	4522.5	4463.2	4371.7	4131.2
15°	4749.5	4742.7	4756.2	4747.8	4722.4	4698.6	4671.5	4610.6	4556.4	4480.1	4221.0
17.5°	4813.8	4813.8	4856.2	4861.2	4837.5	4803.7	4764.7	4703.7	4658.0	4593.6	4327.7
20°	4964.6	4959.5	5013.7	5023.9	4966.3	4913.8	4856.2	4781.6	4746.1	4705.4	4432.7
22.5°	5223.7	5200.0	5232.2	5222.0	5108.5	5027.2	4956.1	4864.6	4846.0	4827.4	4549.6
25°	5560.8	5547.2	5569.3	5469.3	5269.5	5159.4	5074.7	4971.3	4971.3	4990.0	4681.7
27.5°	6050.3	5999.5	5925.0	5748.8	5449.0	5308.4	5216.9	5106.8	5135.6	5205.1	4856.2
30°	6551.7	6495.8	6324.7	6053.7	5667.5	5520.1	5413.4	5298.2	5366.0	5493.0	5089.9
32.5°	7046.3	6983.6	6741.4	6399.2	5980.9	5833.5	5730.2	5603.1	5716.6	5930.0	5432.1
35°	7525.6	7469.7	7190.2	6787.1	6397.5	6275.6	6180.7	6070.6	6216.3	6514.4	5914.8
37.5°	8064.2	8003.3	7662.8	7225.8	6904.0	6815.9	6746.5	6636.4	6890.4	7327.4	6587.2
40°	8726.5	8623.2	8164.2	7728.9	7490.0	7447.7	7400.3	7385.0	7779.7	8384.4	7483.3
42.5°	9485.4	9316.0	8689.3	8259.0	8133.7	8164.2	8152.3	8220.1	8892.5	9698.8	8574.1
45°	10244.2	10025.7	9273.6	8824.8	8841.7	8948.4	9014.5	9285.5	10286.5	11206.3	9747.9
47.5°	10887.8	10672.7	9834.3	9436.2	9639.5	9849.5	10029.1	10542.3	11719.5	12690.1	10660.9
50°	11438.3	11235.1	10428.8	10108.7	10566.0	10904.8	11196.1	11956.6	13260.9	13819.8	11301.1
52.5°	11888.9	11753.4	11045.4	10879.4	11624.6	12120.9	12547.8	13459.0	14626.1	14737.9	11799.1
55°	12327.6	12231.0	11707.6	11795.7	12867.9	13543.7	14084.1	15052.9	15801.6	15503.5	12276.8
57.5°	12832.3	12744.3	12463.1	12957.7	14502.4	15352.7	15942.2	16465.6	16836.5	16286.0	12727.3
60°	13347.3	13296.4	13303.2	14248.4	16379.2	17195.6	17520.8	17656.3	17852.8	17022.8	12752.7
62.5°	13838.5	13935.0	14263.6	15684.7	18176.3	18803.0	18967.3	19101.1	18870.8	17139.7	11782.2
65°	14670.1	14827.6	15611.9	17607.2	20153.0	20823.7	20993.1	20534.1	19031.7	15628.8	9583.6
67.5°	15076.6	15364.6	16763.7	19399.2	22070.4	22815.7	22753.0	20627.3	17078.7	11917.7	6150.2
69°	14991.9	15298.5	17029.6	19948.0	22707.3	23383.1	22985.1	19487.3	14549.9	8633.4	3775.5
70°	14656.6	14966.5	16892.4	19927.7	22788.6	23323.8	22554.8	18079.8	12302.2	6312.8	2361.2
72.5°	12239.5	12507.1	14997.0	18012.0	20993.1	20557.8	18869.1	12525.8	5994.4	1719.2	531.9
75°	7534.1	7683.1	10760.8	13569.1	15855.8	14737.9	12571.5	6231.5	1787.0	486.1	294.7
77.5°	3980.5	4048.2	5891.1	7998.2	10051.1	8316.6	6443.3	2430.6	823.2	304.9	213.4
80°	2352.7	2403.5	3172.5	3656.9	4349.7	3633.2	2576.3	1492.2	589.4	191.4	189.7
82.5°	1346.6	1378.8	2300.2	2032.6	1714.1	1463.5	1282.2	1414.3	354.0	128.7	196.5
85°	494.6	501.4	1294.1	1546.5	1019.7	606.4	636.9	1172.1	94.9	81.3	154.1
87.5°	230.4	225.3	665.7	946.8	596.2	384.5	496.3	257.5	37.3	52.5	42.3
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°	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5	4251.5
2.5°	4200.7	4138.0	4024.5	3907.6	3789.1	3697.6	3607.8	3536.7	3513.0	3468.9	3472.3
5°	4071.9	3956.7	3719.6	3479.1	3228.4	3021.8	2827.0	2669.5	2593.2	2515.3	2515.3
7.5°	3960.1	3792.4	3421.5	3030.2	2625.4	2285.0	1978.4	1748.0	1621.0	1519.4	1517.7
10°	3917.8	3690.8	3172.5	2611.9	2047.8	1583.7	1219.5	985.8	865.5	787.6	784.2
12.5°	3936.4	3655.3	2981.1	2225.7	1517.7	1018.0	706.3	555.6	504.8	481.0	481.0
15°	3990.6	3645.1	2789.7	1848.0	1072.2	636.9	469.2	428.5	425.1	425.1	425.1
17.5°	4056.7	3648.5	2593.2	1480.4	730.0	455.6	404.8	399.7	403.1	403.1	403.1
20°	4124.4	3650.2	2381.5	1139.9	514.9	396.4	381.1	379.4	382.8	382.8	384.5
22.5°	4207.4	3658.6	2169.8	852.0	425.1	374.3	362.5	362.5	364.2	364.2	362.5
25°	4302.3	3675.6	1949.6	631.8	387.9	359.1	348.9	347.2	348.9	347.2	345.5
27.5°	4420.9	3699.3	1704.0	494.6	370.9	343.8	335.4	335.4	333.7	332.0	330.3
30°	4569.9	3726.4	1427.9	420.1	354.0	330.3	321.8	320.1	318.4	315.0	315.0
32.5°	4796.9	3785.7	1155.2	381.1	335.4	311.7	304.9	304.9	301.5	298.1	296.4
35°	5145.8	3902.5	911.3	357.4	315.0	291.3	282.9	282.9	279.5	277.8	276.1
37.5°	5628.5	4080.4	708.0	335.4	294.7	269.3	260.8	259.2	255.8	252.4	250.7
40°	6270.5	4300.6	557.3	315.0	274.4	247.3	240.5	237.1	230.4	225.3	225.3
42.5°	7076.8	4551.3	452.2	293.0	250.7	227.0	221.9	216.8	205.0	199.9	198.2
45°	7920.3	4776.6	382.8	267.6	227.0	206.6	203.3	194.8	179.5	174.5	174.5
47.5°	8528.4	4829.1	337.1	243.9	205.0	184.6	182.9	167.7	154.1	150.7	149.1
50°	8907.8	4725.7	299.8	220.2	184.6	164.3	159.2	140.6	132.1	128.7	127.0
52.5°	9163.5	4541.1	269.3	199.9	166.0	145.7	133.8	120.3	113.5	110.1	110.1
55°	9368.5	4280.3	238.8	181.2	150.7	130.4	113.5	103.3	96.5	93.2	93.2
57.5°	9426.1	3926.3	208.3	166.0	135.5	115.2	96.5	89.8	81.3	79.6	79.6
60°	9007.7	3287.7	184.6	147.4	122.0	99.9	84.7	76.2	67.8	66.1	64.4
62.5°	7905.0	2544.1	162.6	130.4	106.7	86.4	72.8	62.7	55.9	55.9	55.9
65°	6030.0	1705.7	142.3	113.5	93.2	72.8	62.7	50.8	47.4	47.4	49.1
67.5°	3609.5	928.2	122.0	96.5	79.6	61.0	52.5	44.0	42.3	44.0	44.0
69°	2115.6	545.4	110.1	86.4	69.4	54.2	45.7	39.0	42.3	44.0	44.0
70°	1305.9	367.6	101.6	77.9	62.7	49.1	42.3	37.3	40.7	42.3	42.3
72.5°	364.2	189.7	81.3	61.0	50.8	40.7	33.9	33.9	39.0	40.7	40.7
75°	237.1	140.6	62.7	45.7	39.0	32.2	28.8	32.2	37.3	39.0	39.0
77.5°	196.5	115.2	50.8	37.3	32.2	30.5	27.1	28.8	33.9	35.6	35.6
80°	179.5	81.3	40.7	33.9	28.8	27.1	25.4	23.7	30.5	32.2	32.2
82.5°	171.1	64.4	35.6	30.5	27.1	23.7	22.0	23.7	27.1	28.8	30.5
85°	106.7	42.3	32.2	28.8	23.7	22.0	22.0	22.0	25.4	27.1	27.1
87.5°	39.0	33.9	28.8	23.7	20.3	20.3	20.3	20.3	22.0	25.4	25.4
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)