

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: P190931

Luminaire Tested: **GLEON-AF-03-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190931  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K, 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: 15217.4 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 166  
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

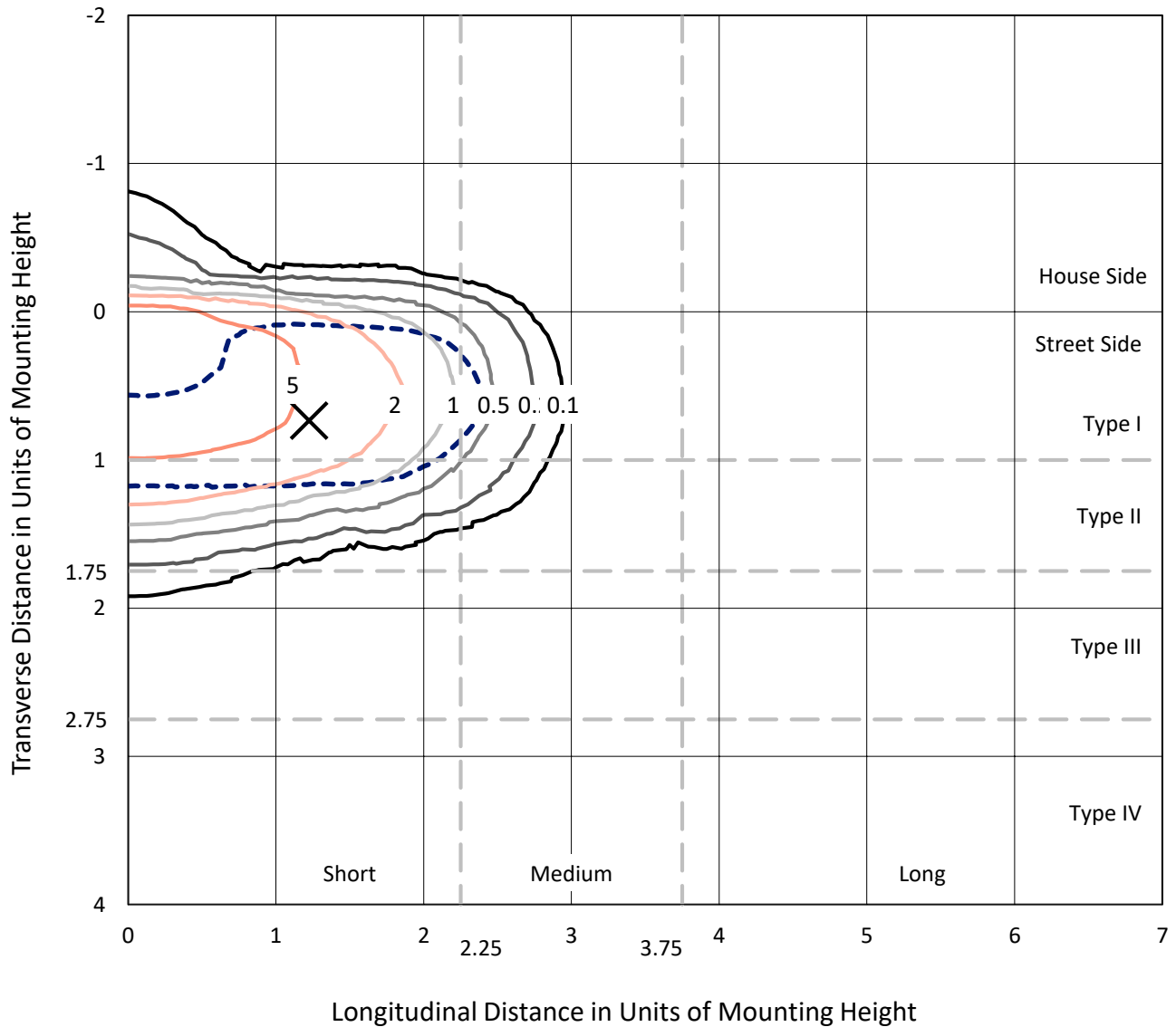


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

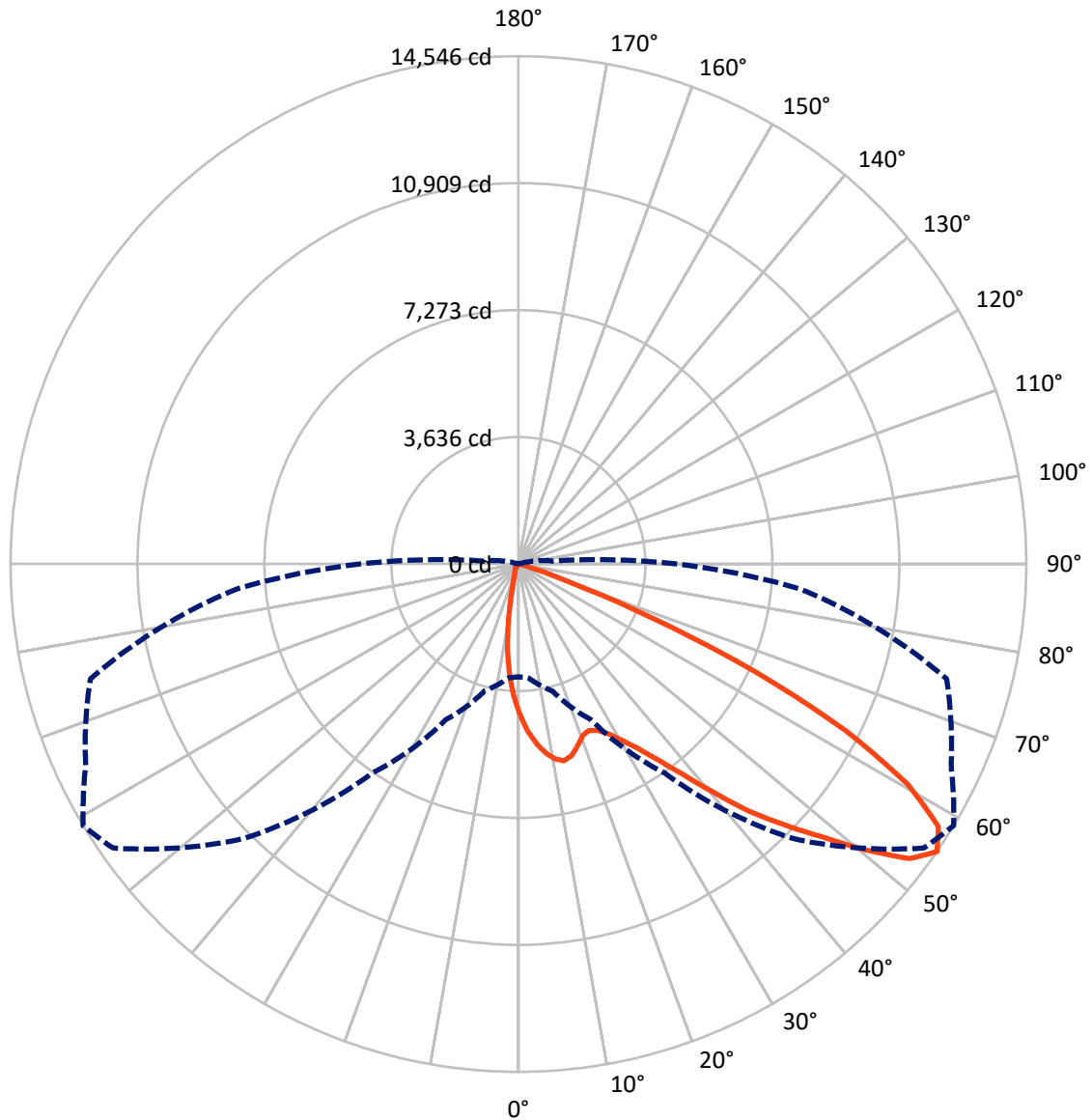


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 55-Deg Vertical

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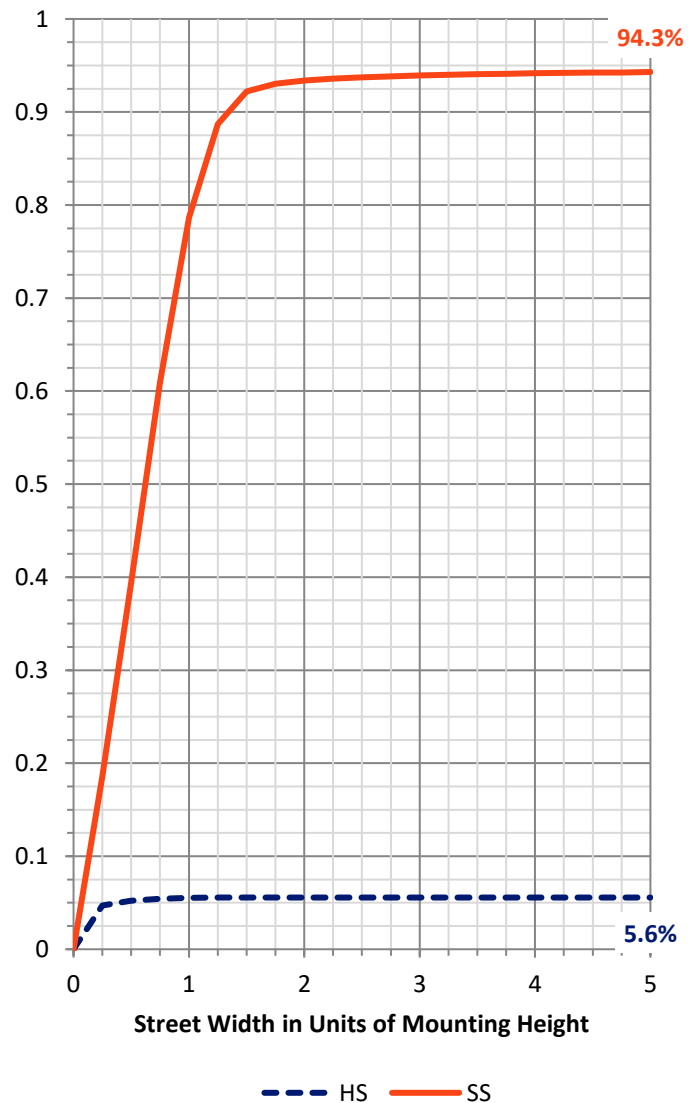
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	850.0	0.0	850.0
	% Fixture	5.6	0.0	5.6
<b>Street Side</b>	Lumens	14367.4	0.0	14367.4
	% Fixture	94.4	0.0	94.4
<b>Total</b>	Lumens	15217.4	0.0	15217.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	358.8	2.4
10°-20°	859.1	5.6
20°-30°	1461.8	9.6
30°-40°	2514.0	16.5
40°-50°	3881.3	25.5
50°-60°	3902.0	25.6
60°-70°	2001.0	13.1
70°-80°	216.8	1.4
80°-90°	22.7	0.1
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°	15217.4	100.0
0°-180°	15217.4	100.0



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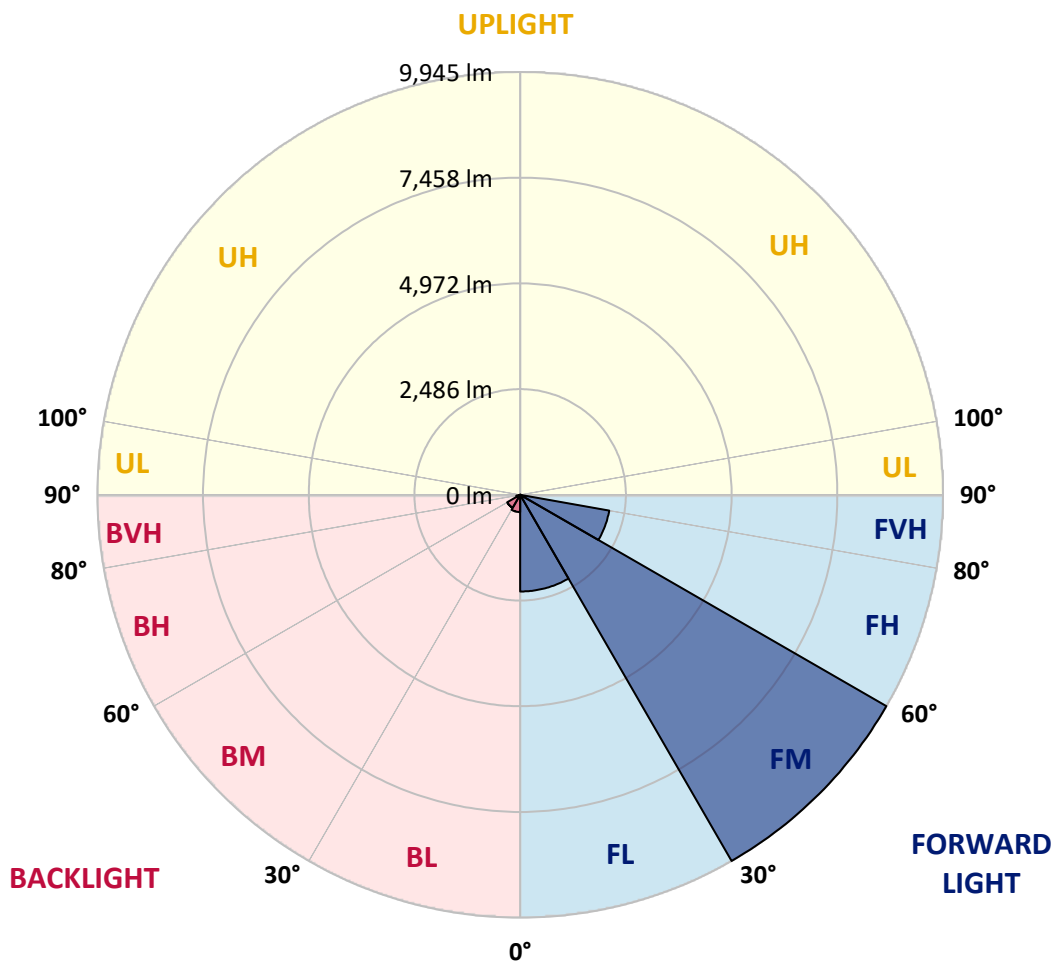
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2274.0	14.9			
FM (30°-60°)	9944.5	65.3			
FH (60°-80°)	2126.7	14.0			G2/5000
FVH (80°-90°)	22.2	0.1			G1/100
BL (0°-30°)	405.7	2.7	B1/500		
BM (30°-60°)	352.8	2.3	B1/1000		
BH (60°-80°)	91.1	0.6	B0/110		G0/110
BVH (80°-90°)	0.5	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°	59°	65°	75°	85°
0°	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6
2.5°	5068.5	5014.6	4998.4	4987.7	4938.3	4876.3	4791.9	4752.4	4671.6	4541.4	4381.5
5°	5532.8	5522.9	5487.0	5467.3	5414.3	5326.3	5191.6	5126.9	4998.4	4779.3	4492.9
7.5°	5329.9	5391.9	5441.2	5523.8	5628.0	5624.4	5511.2	5443.9	5300.2	5011.0	4616.8
10°	4545.9	4596.1	4677.0	4864.6	5247.2	5584.9	5717.8	5669.3	5554.4	5223.9	4736.3
12.5°	4392.3	4386.9	4401.2	4456.1	4656.4	5137.7	5682.8	5780.7	5757.4	5418.8	4849.4
15°	4474.1	4467.7	4466.0	4484.8	4533.3	4736.3	5419.7	5700.8	5881.3	5599.3	4945.5
17.5°	4703.0	4676.1	4661.7	4646.4	4632.1	4682.4	5103.6	5477.2	5900.1	5757.4	5025.5
20°	5095.5	5050.6	4997.6	4911.4	4830.6	4805.4	4970.6	5247.2	5832.8	5877.7	5077.5
22.5°	5588.5	5531.0	5439.4	5282.3	5117.9	5022.7	5036.2	5174.5	5732.2	6008.8	5101.8
25°	6142.6	6069.0	5946.8	5728.6	5487.0	5318.2	5230.1	5278.6	5686.4	6162.4	5129.6
27.5°	6736.2	6654.5	6494.6	6197.3	5923.5	5695.4	5515.8	5509.5	5764.5	6363.5	5174.5
30°	7324.4	7311.8	7103.5	6789.2	6426.4	6148.9	5890.3	5857.0	5982.7	6641.9	5263.4
32.5°	8109.3	8015.0	7760.0	7436.6	7018.2	6685.0	6378.8	6301.6	6317.7	6966.1	5400.8
35°	9098.9	8995.6	8636.5	8190.2	7722.3	7328.9	6990.3	6885.3	6845.8	7496.8	5632.5
37.5°	9738.4	9736.5	9511.1	9056.7	8554.7	8121.0	7752.7	7629.8	7549.8	8138.0	5991.7
40°	9755.4	9797.6	9827.3	9822.8	9465.4	9065.7	8738.9	8587.1	8401.2	8994.8	6456.0
42.5°	9231.8	9340.5	9601.8	10045.5	10257.4	10098.5	9822.8	9673.6	9397.1	9911.7	7021.7
45°	8524.1	8599.6	9056.7	9873.9	10686.7	11122.2	10912.1	10645.3	10280.8	10868.0	7529.1
47.5°	8207.1	8220.6	8516.1	9413.3	10719.0	11961.0	12088.5	11654.8	11083.6	11638.6	7926.1
50°	7259.8	7284.0	7691.7	8614.9	10340.0	12357.0	13270.3	12859.0	11959.2	12232.2	8070.7
52.5°	5471.8	5505.9	6023.1	7302.8	9298.3	12188.2	14116.3	14016.6	12918.3	12522.2	8078.8
55°	3228.4	3273.3	3767.3	4915.9	7313.6	11114.2	14179.1	14545.5	13675.3	12693.8	8066.2
57.5°	1507.8	1539.2	1822.1	2532.5	4548.6	8783.8	13232.6	14182.7	14092.9	12784.5	8155.1
60°	801.1	810.1	878.3	1096.5	2055.6	5569.7	11385.3	12806.9	13712.1	12910.3	8263.8
62.5°	612.4	615.2	611.5	637.6	863.9	2472.3	8605.9	10528.6	12179.3	12815.9	8143.4
65°	530.7	535.2	510.0	503.8	554.1	881.9	5112.5	7504.9	9570.4	11543.4	7323.5
67.5°	476.0	477.7	447.2	421.1	430.2	476.9	2017.0	4108.6	6334.7	8461.3	5308.3
70°	438.2	436.5	403.2	361.9	350.3	326.0	641.2	1506.0	3027.3	4290.9	2468.7
72.5°	387.9	388.8	372.7	318.9	290.9	228.1	297.3	439.2	903.5	1169.2	578.4
75°	343.9	339.4	319.7	285.6	239.8	150.0	147.3	195.8	278.3	276.6	124.8
77.5°	248.8	244.3	250.5	234.4	184.1	97.0	73.7	94.3	113.1	109.6	35.0
80°	182.3	179.6	161.6	194.9	162.5	66.5	45.8	50.3	58.4	49.4	10.7
82.5°	124.8	123.9	114.1	107.7	92.5	40.4	28.7	31.4	37.7	27.8	5.4
85°	19.7	22.4	82.7	65.6	54.8	18.0	19.7	21.6	25.2	15.2	1.8
87.5°	0.0	0.0	38.6	34.2	10.7	7.2	11.7	12.6	12.6	8.1	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6	4283.6
2.5°	4299.8	4210.1	4043.8	3872.4	3713.4	3523.9	3393.7	3295.8	3182.6	3152.1	3218.6
5°	4329.4	4159.7	3802.3	3413.5	3048.0	2642.9	2333.1	2087.9	1866.2	1790.7	1858.9
7.5°	4376.2	4123.8	3540.9	2900.7	2264.8	1632.6	1199.8	915.1	733.7	679.9	708.6
10°	4422.8	4071.8	3238.4	2293.6	1424.3	794.7	517.3	413.1	374.5	366.4	370.9
12.5°	4461.5	4001.7	2869.3	1630.9	761.6	425.6	338.6	321.5	316.1	316.1	317.9
15°	4484.8	3895.7	2431.9	1037.3	438.2	321.5	295.4	290.1	290.1	290.9	292.8
17.5°	4482.2	3761.0	1953.2	627.7	327.8	284.7	269.4	264.9	264.0	265.9	266.7
20°	4448.9	3584.9	1472.7	414.0	285.6	259.5	244.3	236.2	235.3	237.1	238.9
22.5°	4386.0	3367.7	1053.4	318.9	257.8	235.3	216.5	209.2	209.2	211.0	212.9
25°	4309.7	3101.8	720.3	270.3	232.6	209.2	191.3	184.9	186.8	191.3	192.2
27.5°	4214.5	2802.8	489.5	231.7	202.0	183.2	169.7	165.2	169.7	176.0	177.8
30°	4132.8	2491.2	349.3	200.3	171.5	158.0	150.0	150.0	156.3	168.0	170.6
32.5°	4069.9	2189.4	269.4	176.9	149.0	137.4	132.9	137.4	147.3	159.0	161.6
35°	4061.8	1940.6	228.1	158.0	132.9	121.2	119.5	127.6	137.4	146.4	148.2
37.5°	4123.8	1710.8	205.6	142.8	118.6	107.7	106.0	115.8	125.7	136.5	139.2
40°	4241.5	1530.2	189.5	128.4	106.9	95.2	91.6	98.8	112.2	126.6	130.2
42.5°	4394.1	1381.2	171.5	114.1	95.2	79.1	74.6	82.7	97.0	112.2	116.7
45°	4539.5	1252.8	151.8	97.9	79.9	61.1	59.2	70.1	77.2	92.5	96.1
47.5°	4619.5	1139.6	134.7	79.9	62.0	49.4	49.4	52.1	59.2	77.2	80.8
50°	4592.5	1048.9	116.7	59.2	43.1	37.7	37.7	36.8	47.6	62.0	64.7
52.5°	4538.7	996.9	100.6	45.8	29.7	26.9	24.2	26.9	33.2	39.5	40.4
55°	4530.6	987.9	84.4	36.8	20.7	18.0	13.5	13.5	13.5	12.6	10.7
57.5°	4593.5	1002.2	71.0	29.7	15.2	11.7	7.2	0.0	0.0	0.0	0.0
60°	4658.1	1017.5	61.1	20.7	10.7	6.2	0.9	0.0	0.0	0.0	0.0
62.5°	4550.4	983.4	51.1	12.6	8.1	2.7	0.0	0.0	0.0	0.0	0.0
65°	3997.2	837.0	40.4	9.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2843.2	560.4	26.9	5.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	1297.7	234.4	17.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	277.5	72.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	56.6	53.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	18.0	83.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	10.7	60.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)