

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: P190932

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190932
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-04-LED-E1-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 20107.1 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 225
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

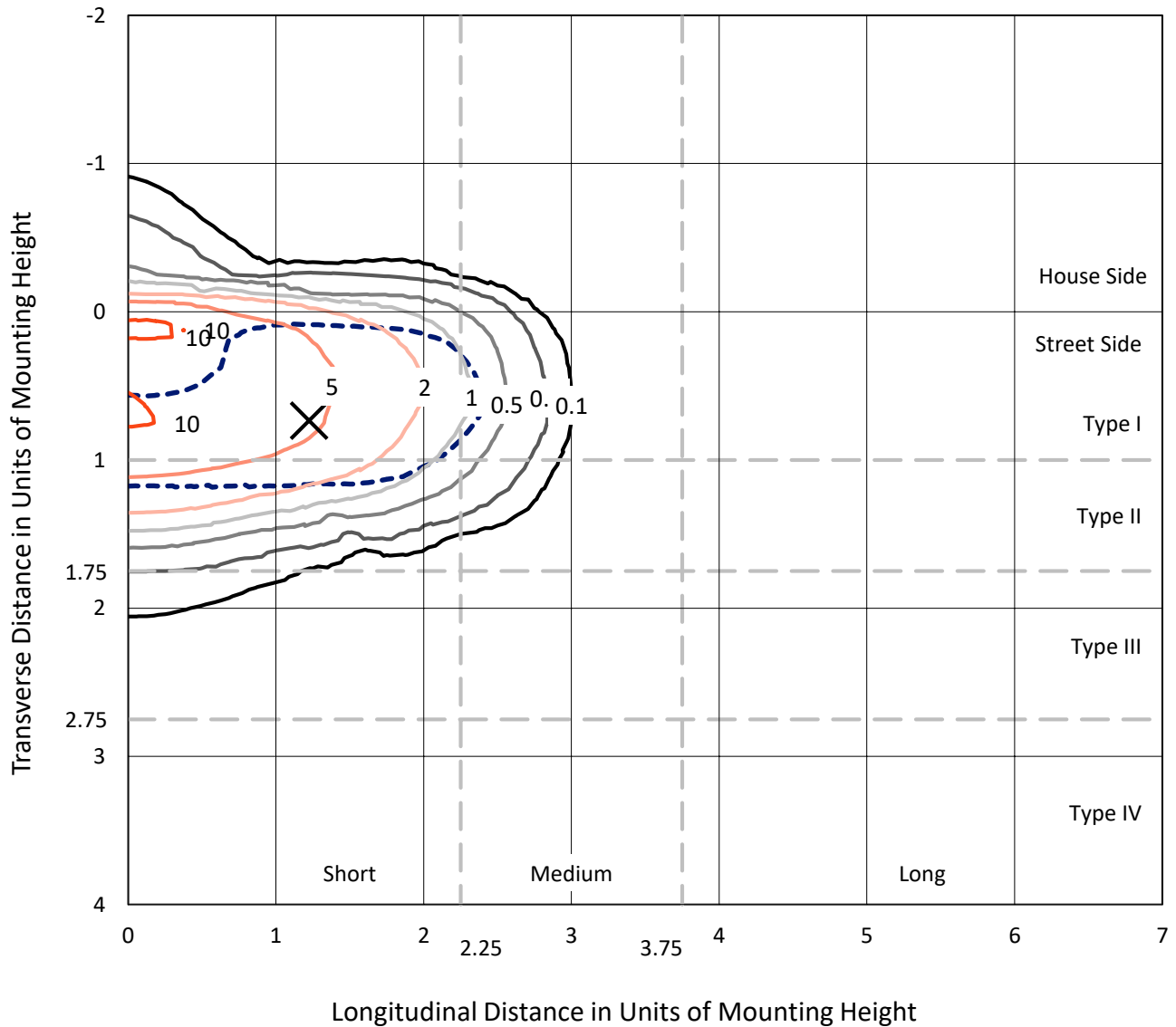


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

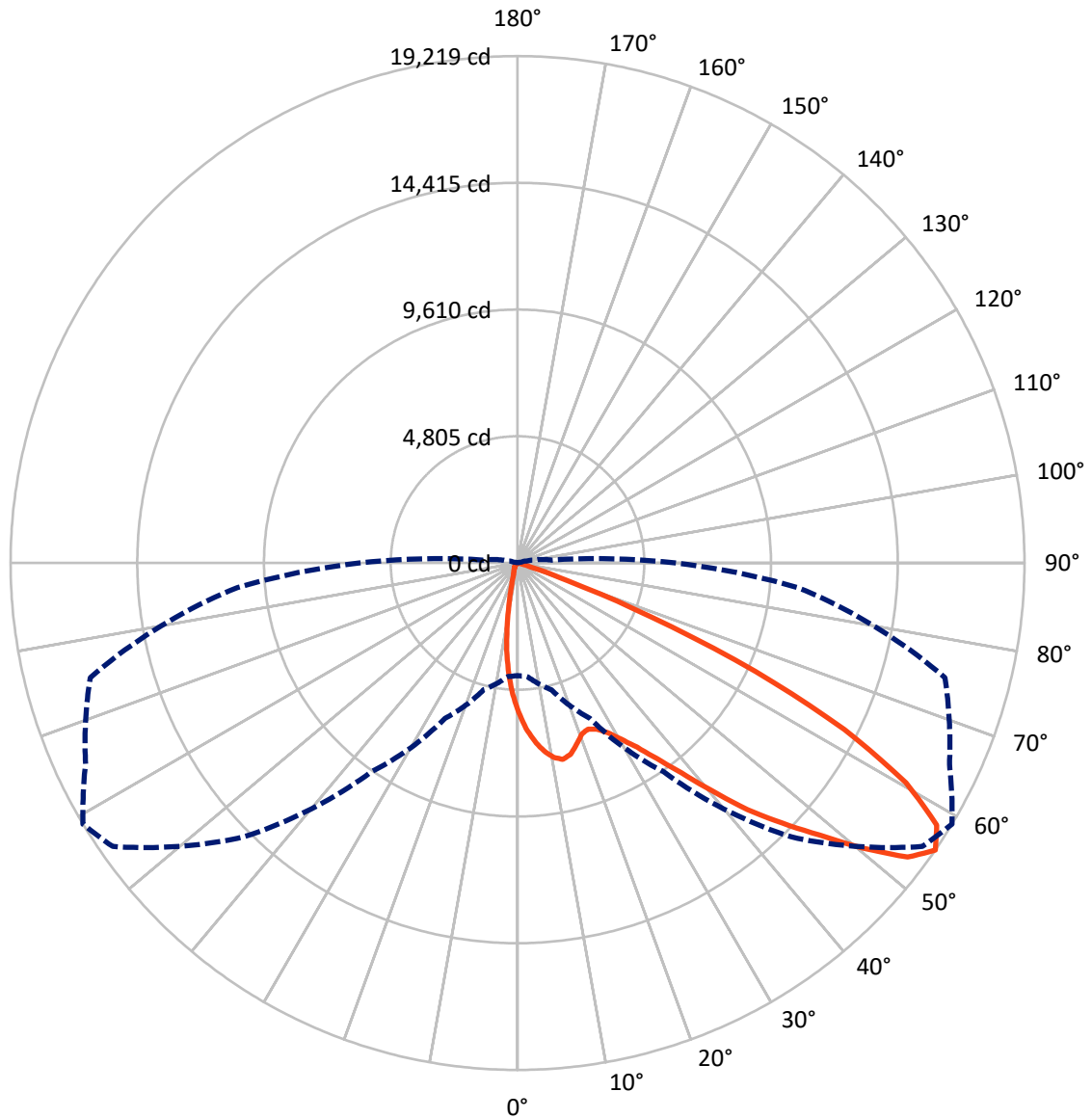


Based on 25 foot mounting height. Maximum calculated value = 11.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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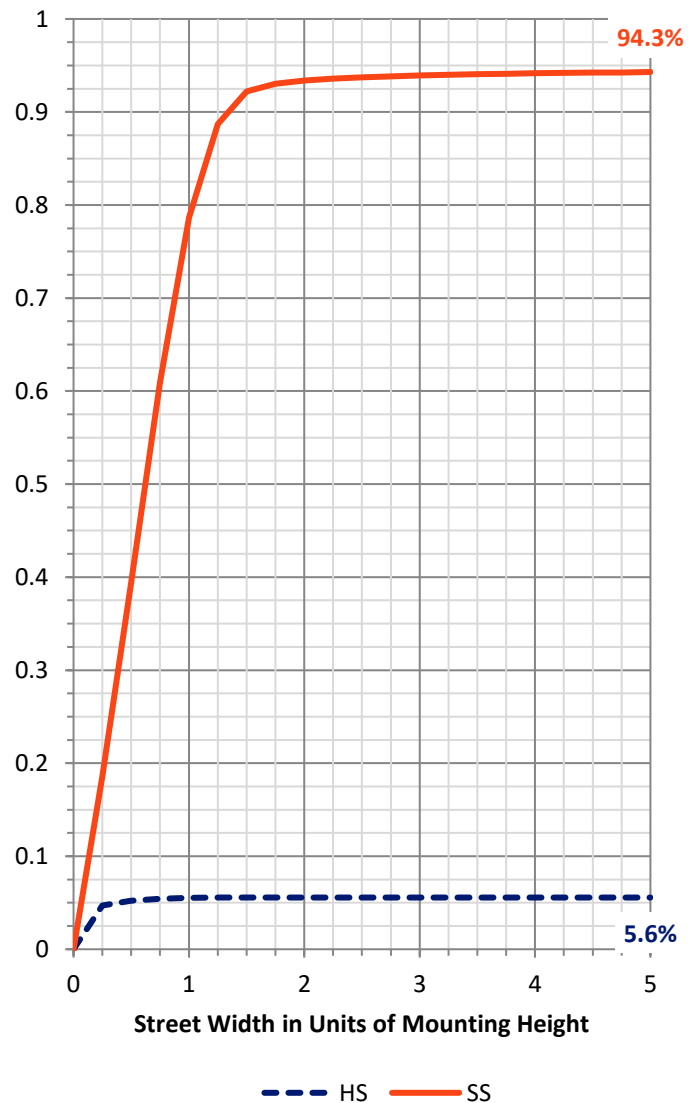
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1123.1	0.0	1123.1
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	18984.0	0.0	18984.0
	% Fixture	94.4	0.0	94.4
Total	Lumens	20107.1	0.0	20107.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.1	2.4
10°-20°	1135.1	5.6
20°-30°	1931.5	9.6
30°-40°	3321.8	16.5
40°-50°	5128.5	25.5
50°-60°	5155.8	25.6
60°-70°	2643.9	13.1
70°-80°	286.5	1.4
80°-90°	29.9	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°	20107.1	100.0
0°-180°	20107.1	100.0



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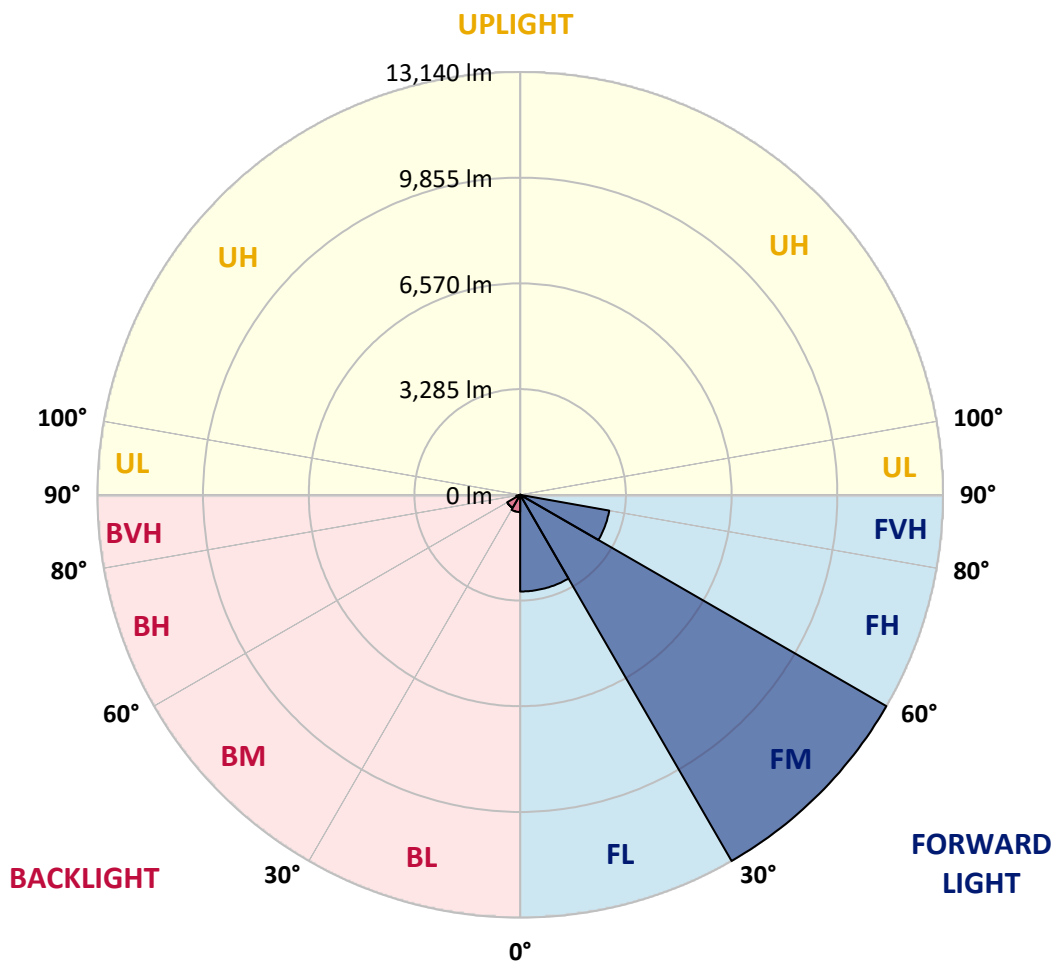
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3004.7	14.9			
FM (30°-60°)	13139.9	65.3			
FH (60°-80°)	2810.1	14.0			G2/5000
FVH (80°-90°)	29.3	0.1			G1/100
BL (0°-30°)	536.1	2.7	B2/1000		
BM (30°-60°)	466.1	2.3	B1/1000		
BH (60°-80°)	120.3	0.6	B1/500		G1/500
BVH (80°-90°)	0.6	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1
2.5°	6697.2	6626.0	6604.6	6590.4	6525.1	6443.3	6331.7	6279.5	6172.7	6000.6	5789.4
5°	7310.6	7297.6	7250.2	7224.0	7154.0	7037.7	6859.7	6774.3	6604.6	6315.1	5936.6
7.5°	7042.5	7124.3	7189.6	7298.8	7436.4	7431.6	7282.2	7193.2	7003.3	6621.3	6100.3
10°	6006.6	6073.1	6179.9	6427.8	6933.3	7379.5	7555.1	7491.0	7339.2	6902.5	6258.1
12.5°	5803.7	5796.6	5815.6	5887.9	6152.5	6788.5	7508.8	7638.2	7607.3	7159.9	6407.7
15°	5911.6	5903.3	5901.0	5925.9	5990.0	6258.1	7161.2	7532.5	7771.1	7398.5	6534.6
17.5°	6214.2	6178.6	6159.6	6139.4	6120.5	6186.9	6743.5	7237.1	7796.0	7607.3	6640.2
20°	6732.8	6673.4	6603.5	6489.5	6382.7	6349.5	6567.9	6933.3	7707.0	7766.3	6709.0
22.5°	7384.2	7308.3	7187.3	6979.6	6762.4	6636.7	6654.5	6837.2	7574.0	7939.5	6741.0
25°	8116.3	8019.0	7857.7	7569.3	7250.2	7027.1	6910.7	6974.8	7513.6	8142.5	6777.9
27.5°	8900.7	8792.7	8581.5	8188.7	7826.8	7525.4	7288.1	7279.8	7616.8	8408.2	6837.2
30°	9677.9	9661.3	9386.0	8970.7	8491.3	8124.7	7782.9	7739.0	7905.2	8776.1	6954.6
32.5°	10715.0	10590.4	10253.4	9826.3	9273.3	8833.1	8428.4	8326.4	8347.7	9204.4	7136.2
35°	12022.6	11886.2	11411.5	10821.8	10203.5	9683.9	9236.5	9097.6	9045.4	9905.7	7442.4
37.5°	12867.5	12865.1	12567.3	11966.9	11303.5	10730.4	10243.9	10081.4	9975.7	10753.0	7917.0
40°	12890.0	12945.9	12984.9	12979.0	12506.8	11978.8	11546.8	11346.3	11100.7	11884.9	8530.5
42.5°	12198.3	12341.8	12687.1	13273.3	13553.4	13343.3	12979.0	12782.1	12416.6	13096.5	9278.1
45°	11263.2	11362.8	11966.9	13046.7	14120.5	14696.0	14418.4	14066.0	13584.2	14360.2	9948.5
47.5°	10844.3	10862.1	11252.6	12438.0	14163.3	15804.3	15972.9	15399.7	14645.0	15378.3	10473.0
50°	9592.5	9624.5	10163.2	11383.1	13662.5	16327.6	17534.4	16990.9	15801.9	16162.7	10664.0
52.5°	7229.9	7275.0	7958.6	9649.4	12286.0	16104.5	18652.2	18520.4	17069.3	16545.9	10674.7
55°	4265.8	4325.1	4977.8	6495.4	9663.7	14685.4	18735.2	19219.4	18069.5	16772.6	10658.0
57.5°	1992.3	2033.8	2407.6	3346.2	6010.1	11606.1	17484.6	18739.9	18621.3	16892.4	10775.6
60°	1058.4	1070.3	1160.5	1448.8	2716.1	7359.3	15043.7	16922.1	18118.2	17058.5	10919.1
62.5°	809.3	812.8	808.0	842.5	1141.5	3266.7	11371.2	13911.7	16092.7	16933.9	10760.1
65°	701.2	707.2	674.0	665.6	732.1	1165.2	6755.4	9916.4	12645.6	15252.6	9676.7
67.5°	628.9	631.3	591.0	556.5	568.4	630.0	2665.1	5428.7	8370.3	11180.1	7014.0
70°	579.1	576.6	532.8	478.2	462.8	430.8	847.2	1989.9	4000.0	5669.6	3262.0
72.5°	512.6	513.8	492.4	421.3	384.4	301.4	392.8	580.2	1193.7	1545.0	764.1
75°	454.5	448.6	422.5	377.4	316.8	198.1	194.6	258.7	367.9	365.5	164.9
77.5°	328.7	322.7	331.0	309.7	243.3	128.2	97.3	124.6	149.6	144.7	46.2
80°	240.9	237.3	213.6	257.5	214.8	87.8	60.6	66.5	77.1	65.3	14.2
82.5°	164.9	163.8	150.7	142.4	122.2	53.4	38.0	41.5	49.8	36.8	7.2
85°	26.1	29.7	109.1	86.6	72.4	23.7	26.1	28.4	33.2	20.2	2.4
87.5°	0.0	0.0	51.0	45.1	14.2	9.5	15.4	16.6	16.6	10.6	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°	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1	5660.1
2.5°	5681.5	5562.8	5343.3	5116.6	4906.6	4656.3	4484.2	4354.8	4205.4	4164.9	4252.8
5°	5720.6	5496.3	5024.0	4510.3	4027.4	3492.1	3082.8	2758.8	2465.7	2366.1	2456.3
7.5°	5782.3	5448.8	4678.8	3832.7	2992.6	2157.2	1585.3	1209.1	969.5	898.3	936.2
10°	5844.0	5380.0	4278.9	3030.6	1881.9	1050.2	683.4	545.8	494.8	484.2	490.1
12.5°	5895.1	5287.5	3791.2	2154.8	1006.3	562.4	447.3	424.8	417.7	417.7	420.0
15°	5925.9	5147.5	3213.3	1370.5	579.1	424.8	390.4	383.3	383.3	384.4	386.9
17.5°	5922.3	4969.5	2580.9	829.4	433.1	376.1	356.0	350.1	348.8	351.3	352.4
20°	5878.4	4736.9	1946.1	547.0	377.4	342.9	322.7	312.1	310.9	313.2	315.7
22.5°	5795.3	4449.7	1391.9	421.3	340.5	310.9	286.0	276.5	276.5	278.9	281.2
25°	5694.5	4098.6	951.7	357.2	307.3	276.5	252.8	244.5	246.8	252.8	253.9
27.5°	5568.7	3703.4	646.7	306.2	267.0	242.0	224.2	218.3	224.2	232.6	235.0
30°	5460.7	3291.7	461.6	264.6	226.7	208.9	198.1	198.1	206.4	221.9	225.5
32.5°	5377.7	2892.9	356.0	233.7	197.0	181.6	175.6	181.6	194.6	210.0	213.6
35°	5367.0	2564.2	301.4	208.9	175.6	160.2	157.8	168.5	181.6	193.4	195.8
37.5°	5448.8	2260.5	271.7	188.6	156.6	142.4	140.0	153.0	166.1	180.3	183.9
40°	5604.3	2022.0	250.4	169.7	141.2	125.8	121.0	130.5	148.3	167.4	172.1
42.5°	5806.1	1824.9	226.7	150.7	125.8	104.4	98.5	109.1	128.2	148.3	154.3
45°	5998.3	1655.3	200.5	129.3	105.6	80.7	78.4	92.6	102.1	122.2	126.9
47.5°	6103.8	1505.8	178.0	105.6	81.8	65.3	65.3	68.8	78.4	102.1	106.8
50°	6068.2	1386.0	154.3	78.4	57.0	49.8	49.8	48.7	62.9	81.8	85.4
52.5°	5997.0	1317.2	132.9	60.6	39.2	35.6	32.0	35.6	43.9	52.2	53.4
55°	5986.4	1305.3	111.5	48.7	27.3	23.7	17.8	17.8	17.8	16.6	14.2
57.5°	6069.5	1324.2	93.7	39.2	20.2	15.4	9.5	0.0	0.0	0.0	0.0
60°	6154.9	1344.5	80.7	27.3	14.2	8.3	1.2	0.0	0.0	0.0	0.0
62.5°	6012.5	1299.4	67.6	16.6	10.6	3.6	0.0	0.0	0.0	0.0	0.0
65°	5281.6	1105.9	53.4	11.9	7.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	3756.8	740.4	35.6	7.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
70°	1714.7	309.7	22.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	366.6	96.2	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	74.8	70.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	23.7	110.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	14.2	79.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.4	11.9	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)