

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: P190922

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190922
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-800-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA 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: 16245.5 lumens
Efficiency: N/A
Efficacy: 95.0 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): 171
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

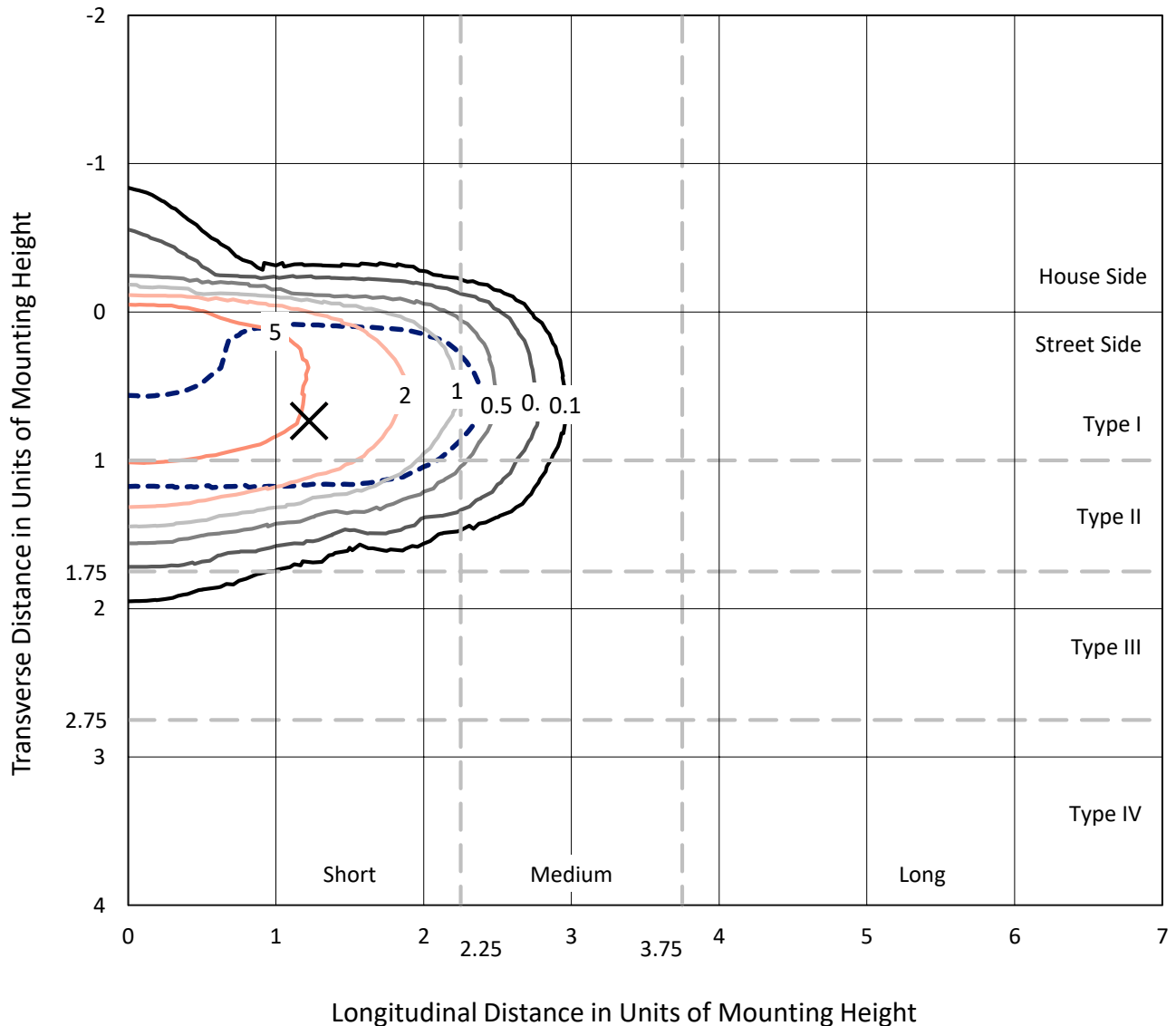


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Iso-Footcandle Lines of Horizontal Illumination

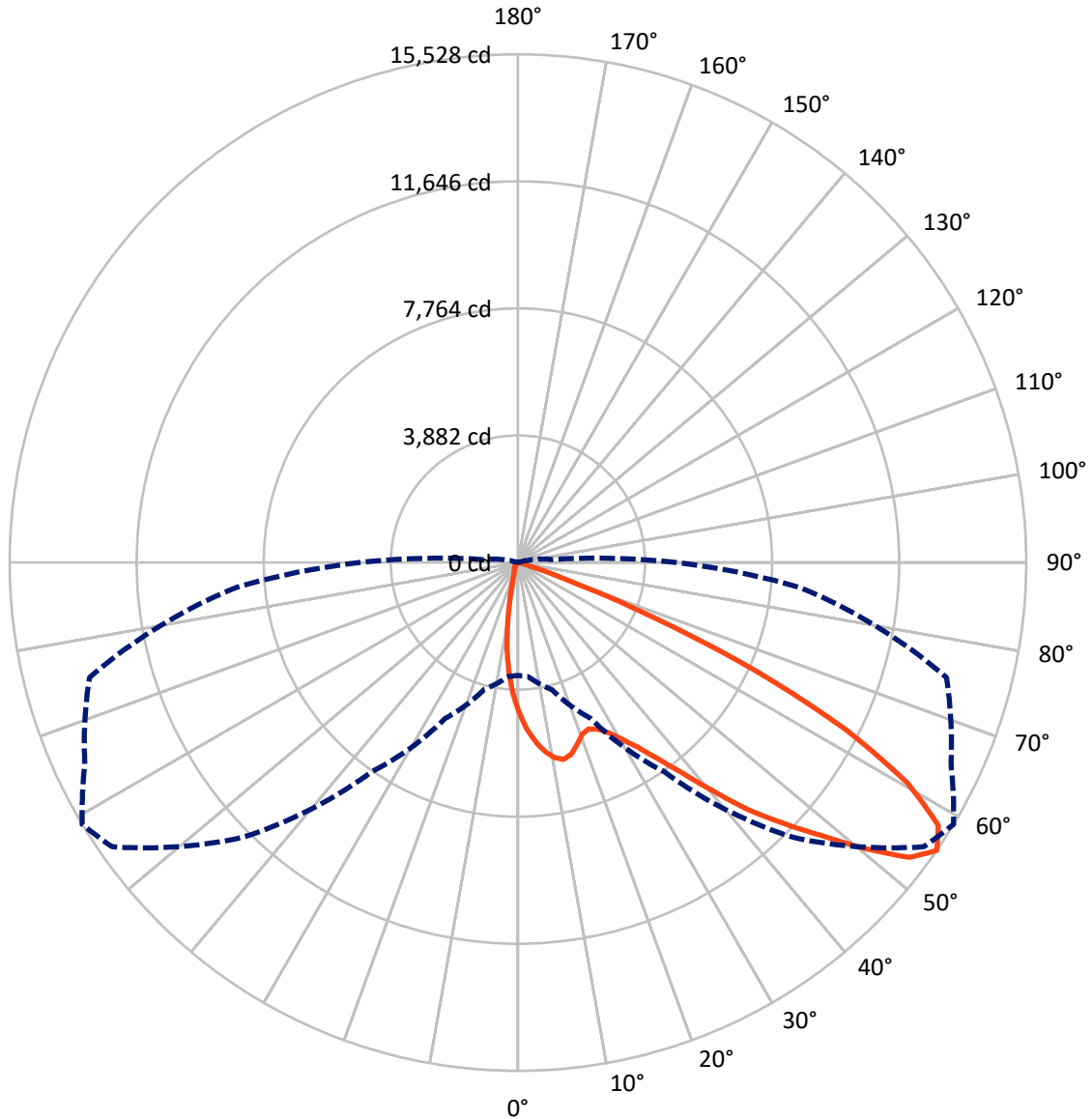
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 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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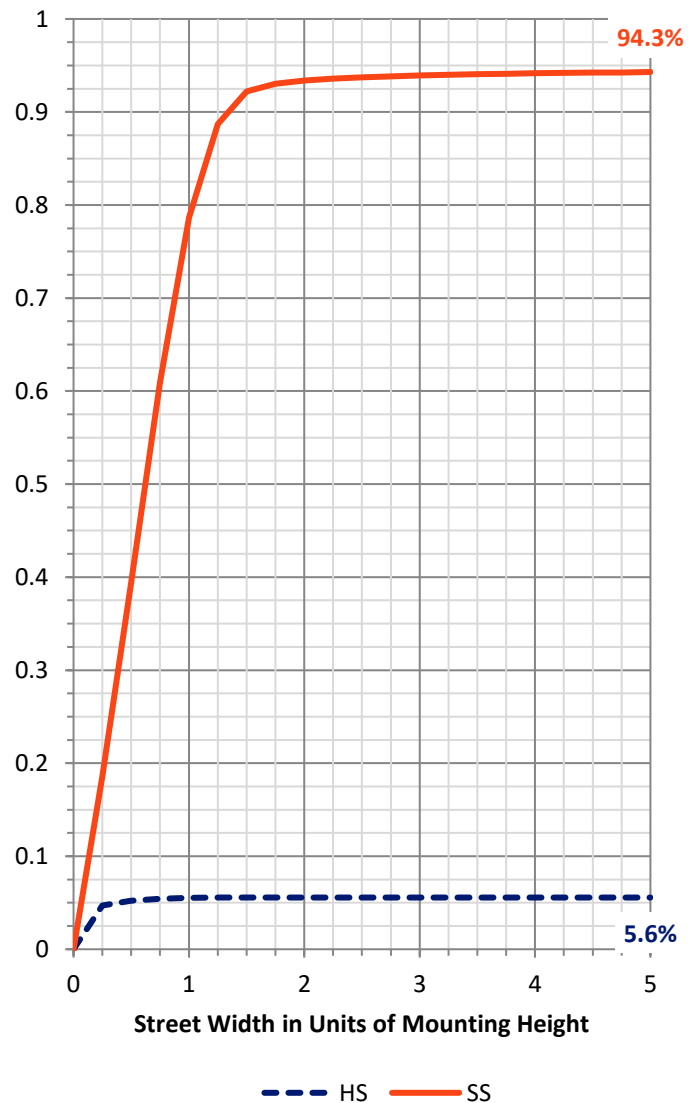
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	907.4	0.0	907.4
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	15338.1	0.0	15338.1
	% Fixture	94.4	0.0	94.4
Total	Lumens	16245.5	0.0	16245.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.0	2.4
10°-20°	917.1	5.6
20°-30°	1560.6	9.6
30°-40°	2683.8	16.5
40°-50°	4143.5	25.5
50°-60°	4165.6	25.6
60°-70°	2136.1	13.1
70°-80°	231.5	1.4
80°-90°	24.2	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°	16245.5	100.0
0°-180°	16245.5	100.0



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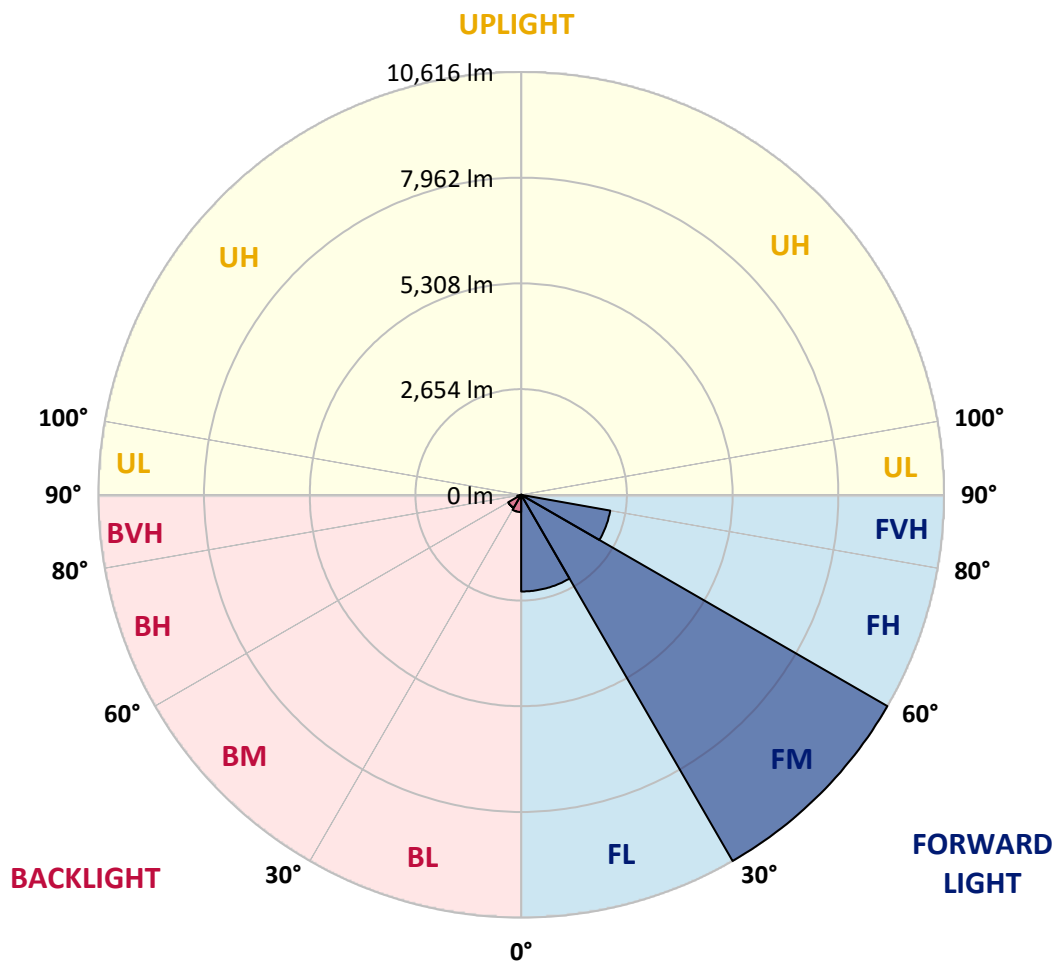
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2427.6	14.9			
FM	(30°-60°)	10616.4	65.3			
FH	(60°-80°)	2270.4	14.0			G2/5000
FVH	(80°-90°)	23.7	0.1			G1/100
BL	(0°-30°)	433.1	2.7	B1/500		
BM	(30°-60°)	376.6	2.3	B1/1000		
BH	(60°-80°)	97.2	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°	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0
2.5°	5411.0	5353.4	5336.2	5324.7	5272.0	5205.8	5115.7	5073.5	4987.2	4848.2	4677.5
5°	5906.6	5896.1	5857.7	5836.7	5780.1	5686.1	5542.3	5473.3	5336.2	5102.3	4796.4
7.5°	5690.0	5756.0	5808.8	5897.0	6008.2	6004.4	5883.6	5811.7	5658.4	5349.6	4928.7
10°	4853.0	4906.7	4992.9	5193.3	5601.8	5962.2	6104.2	6052.3	5929.6	5576.8	5056.2
12.5°	4689.0	4683.3	4698.6	4757.1	4970.9	5484.8	6066.7	6171.3	6146.3	5784.9	5177.1
15°	4776.3	4769.6	4767.7	4787.8	4839.6	5056.2	5785.8	6085.8	6278.6	5977.5	5279.7
17.5°	5020.7	4992.0	4976.7	4960.4	4945.0	4998.8	5448.3	5847.2	6298.7	6146.3	5365.0
20°	5439.7	5391.8	5335.2	5243.1	5156.9	5130.1	5306.5	5601.8	6226.8	6274.8	5420.5
22.5°	5966.1	5904.7	5806.9	5639.1	5463.7	5362.1	5376.4	5524.0	6119.4	6414.7	5446.4
25°	6557.5	6479.0	6348.5	6115.6	5857.7	5677.5	5583.6	5635.3	6070.6	6578.7	5476.2
27.5°	7191.2	7104.1	6933.4	6616.0	6323.7	6080.1	5888.4	5881.7	6154.0	6793.4	5524.0
30°	7819.2	7805.8	7583.4	7247.8	6860.5	6564.3	6288.2	6252.7	6386.9	7090.6	5619.0
32.5°	8657.1	8556.5	8284.2	7939.1	7492.3	7136.6	6809.7	6727.2	6744.5	7436.8	5765.7
35°	9713.6	9603.4	9220.0	8743.5	8244.0	7824.0	7462.6	7350.4	7308.3	8003.3	6013.0
37.5°	10396.2	10394.3	10153.7	9668.6	9132.7	8669.6	8276.5	8145.2	8059.8	8687.8	6396.5
40°	10414.5	10459.6	10491.2	10486.4	10104.8	9678.1	9329.2	9167.2	8968.7	9602.4	6892.1
42.5°	9855.5	9971.5	10250.5	10724.1	10950.4	10780.7	10486.4	10327.2	10032.0	10581.3	7496.2
45°	9100.1	9180.6	9668.6	10541.0	11408.7	11873.6	11649.3	11364.6	10975.3	11602.3	8037.8
47.5°	8761.7	8776.0	9091.5	10049.2	11443.1	12769.1	12905.1	12442.2	11832.4	12424.9	8461.5
50°	7750.2	7776.1	8211.3	9196.9	11038.6	13191.9	14166.8	13727.8	12767.1	13058.6	8615.9
52.5°	5841.5	5877.9	6430.1	7796.2	9926.5	13011.6	15069.9	14963.5	13791.0	13368.2	8624.6
55°	3446.5	3494.5	4021.8	5247.9	7807.8	11865.0	15137.1	15528.2	14599.2	13551.3	8611.1
57.5°	1609.7	1643.3	1945.2	2703.6	4855.8	9377.2	14126.5	15140.9	15045.0	13648.2	8706.0
60°	855.2	864.8	937.6	1170.6	2194.5	5945.9	12154.5	13672.1	14638.5	13782.4	8822.0
62.5°	653.9	656.7	652.8	680.7	922.3	2639.3	9187.3	11239.9	13002.0	13681.8	8693.5
65°	566.6	571.4	544.5	537.9	591.6	941.4	5458.0	8012.0	10216.9	12323.3	7818.3
67.5°	508.1	510.0	477.4	449.6	459.2	509.1	2153.3	4386.1	6762.7	9033.0	5666.9
70°	467.9	466.0	430.5	386.4	373.9	348.0	684.6	1607.8	3231.8	4580.7	2635.5
72.5°	414.2	415.1	397.8	340.3	310.7	243.5	317.3	468.8	964.4	1248.2	617.5
75°	367.1	362.4	341.3	304.8	255.9	160.1	157.2	209.0	297.2	295.3	133.3
77.5°	265.6	260.8	267.5	250.2	196.5	103.5	78.7	100.7	120.8	116.9	37.4
80°	194.7	191.7	172.6	208.1	173.5	71.0	48.9	53.7	62.3	52.7	11.5
82.5°	133.3	132.3	121.7	115.1	98.7	43.2	30.7	33.6	40.3	29.8	5.7
85°	21.1	23.9	88.2	70.0	58.5	19.1	21.1	23.0	26.8	16.3	1.9
87.5°	0.0	0.0	41.2	36.4	11.5	7.7	12.5	13.4	13.4	8.6	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°	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0	4573.0
2.5°	4590.3	4494.4	4317.1	4133.9	3964.2	3762.0	3623.0	3518.4	3397.6	3365.1	3436.0
5°	4621.9	4440.7	4059.2	3644.1	3253.9	2821.5	2490.7	2229.0	1992.2	1911.7	1984.5
7.5°	4671.8	4402.4	3780.2	3096.7	2417.8	1742.9	1280.8	976.9	783.3	725.8	756.5
10°	4721.6	4346.8	3457.1	2448.5	1520.5	848.4	552.2	441.0	399.8	391.2	396.0
12.5°	4762.9	4272.0	3063.1	1741.1	812.9	454.4	361.4	343.2	337.5	337.5	339.4
15°	4787.8	4158.9	2596.1	1107.3	467.9	343.2	315.4	309.6	309.6	310.7	312.5
17.5°	4785.0	4015.1	2085.2	670.1	350.0	303.9	287.7	282.8	281.8	283.8	284.7
20°	4749.5	3827.2	1572.3	441.9	304.8	277.1	260.8	252.2	251.1	253.1	255.0
22.5°	4682.4	3595.2	1124.5	340.3	275.2	251.1	231.1	223.4	223.4	225.3	227.2
25°	4600.8	3311.4	768.8	288.6	248.3	223.4	204.2	197.5	199.4	204.2	205.2
27.5°	4499.2	2992.1	522.5	247.3	215.7	195.6	181.2	176.4	181.2	187.9	189.9
30°	4412.0	2659.5	373.0	213.8	183.1	168.7	160.1	160.1	166.8	179.3	182.2
32.5°	4344.9	2337.3	287.7	188.8	159.2	146.7	141.9	146.7	157.2	169.7	172.6
35°	4336.3	2071.8	243.5	168.7	141.9	129.4	127.5	136.2	146.7	156.3	158.1
37.5°	4402.4	1826.4	219.5	152.4	126.5	115.1	113.1	123.7	134.2	145.8	148.6
40°	4528.0	1633.7	202.2	137.1	114.1	101.6	97.8	105.5	119.9	135.1	139.0
42.5°	4690.9	1474.5	183.1	121.7	101.6	84.4	79.6	88.2	103.5	119.9	124.6
45°	4846.2	1337.4	162.0	104.5	85.3	65.2	63.3	74.8	82.4	98.7	102.6
47.5°	4931.6	1216.6	143.8	85.3	66.2	52.7	52.7	55.6	63.3	82.4	86.2
50°	4902.8	1119.7	124.6	63.3	46.0	40.3	40.3	39.3	50.8	66.2	69.0
52.5°	4845.3	1064.2	107.4	48.9	31.6	28.7	25.9	28.7	35.5	42.1	43.2
55°	4836.7	1054.6	90.1	39.3	22.1	19.1	14.4	14.4	14.4	13.4	11.5
57.5°	4903.8	1069.9	75.7	31.6	16.3	12.5	7.7	0.0	0.0	0.0	0.0
60°	4972.9	1086.2	65.2	22.1	11.5	6.8	0.9	0.0	0.0	0.0	0.0
62.5°	4857.8	1049.8	54.6	13.4	8.6	2.9	0.0	0.0	0.0	0.0	0.0
65°	4267.2	893.5	43.2	9.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	3035.3	598.2	28.7	5.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	1385.4	250.2	18.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	296.2	77.6	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	60.4	56.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	19.1	89.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	11.5	64.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.9	9.6	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)