

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: P510748

Luminaire Tested: **CTN-CA8-230-760-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510748
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA8-230-760-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33322 lumens
Efficiency: N/A
Efficacy: 145.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

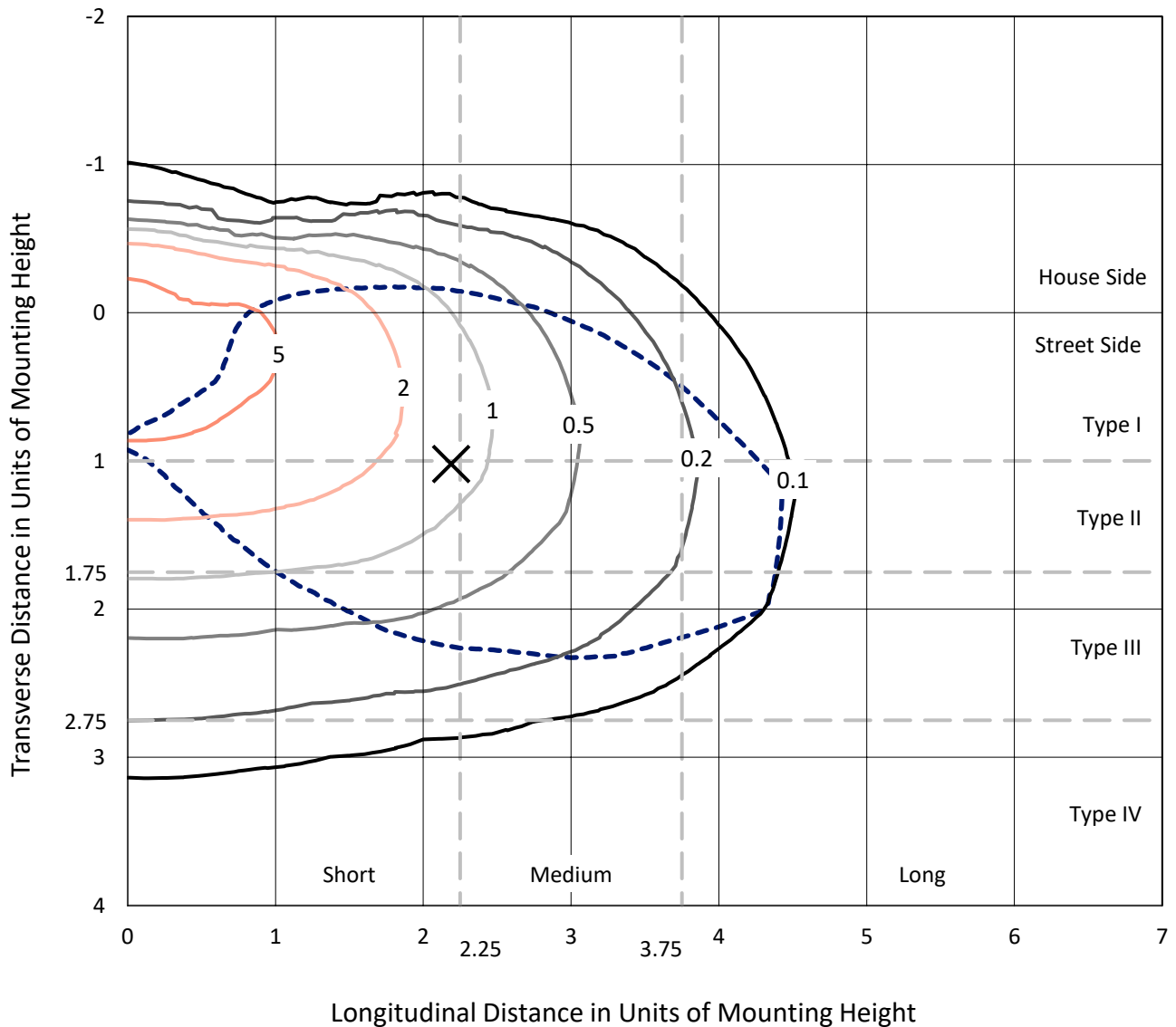
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

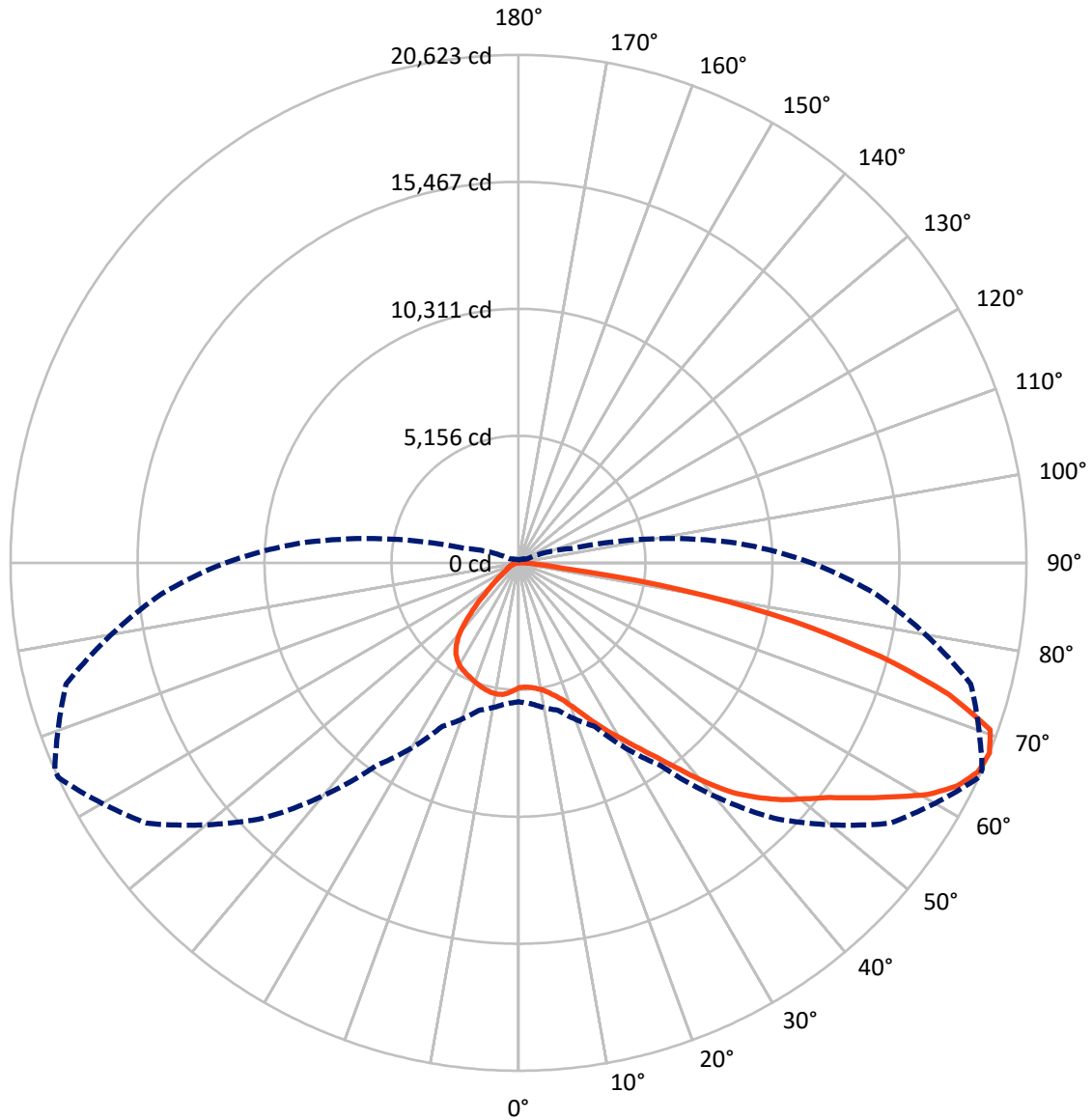
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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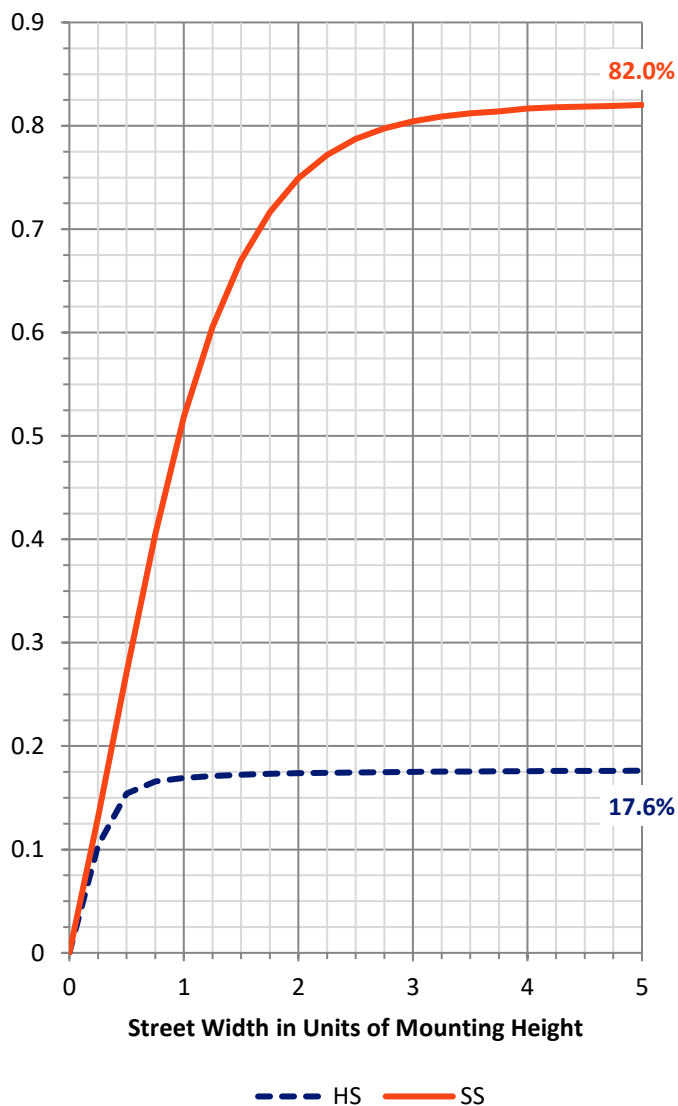
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5955.5	0.0	5955.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	27366.5	0.0	27366.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	33322.0	0.0	33322.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.9	1.5
10°-20°	1546.6	4.6
20°-30°	2683.1	8.1
30°-40°	4047.3	12.1
40°-50°	5611.9	16.8
50°-60°	6927.2	20.8
60°-70°	7380.8	22.1
70°-80°	4223.4	12.7
80°-90°	400.7	1.2
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°	33322.0	100.0
0°-180°	33322.0	100.0

Coefficient of Utilization

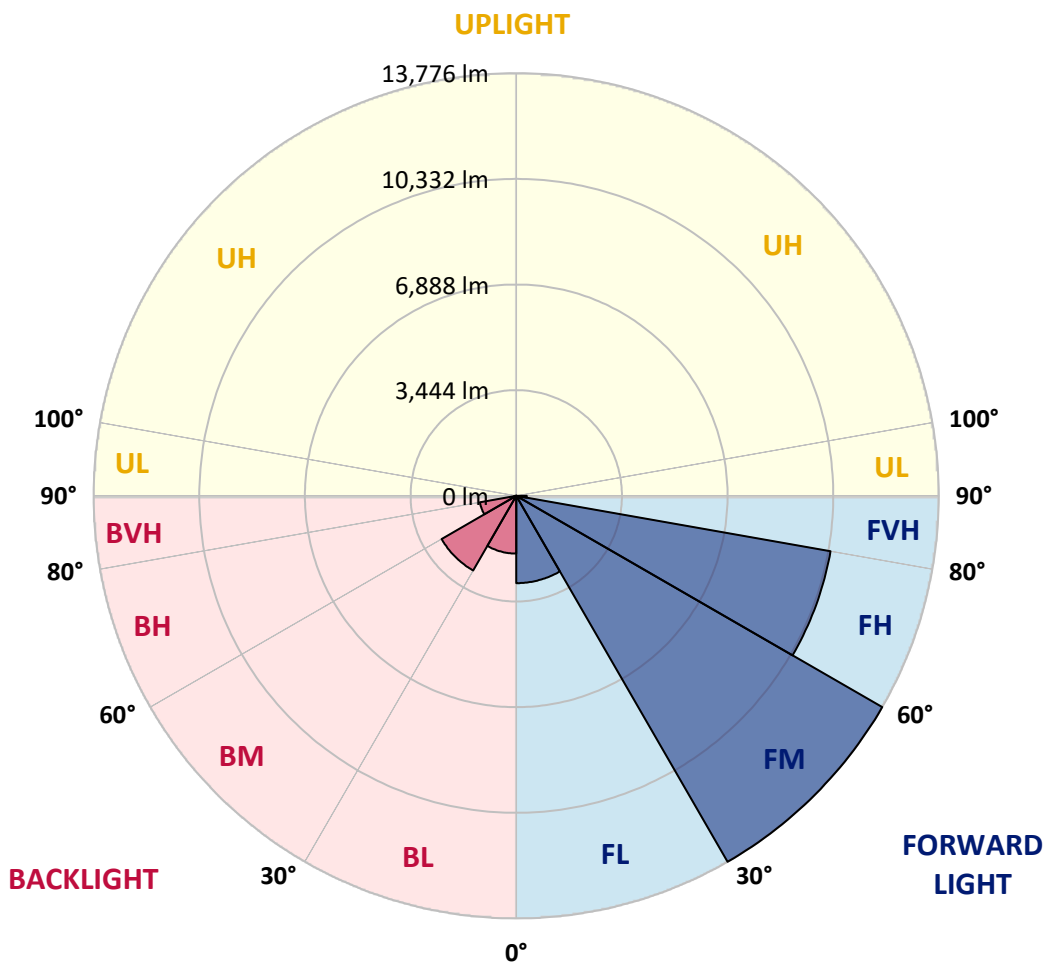


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2846.1	8.5			
FM (30°-60°)	13775.8	41.3			
FH (60°-80°)	10402.2	31.2			G4/12000
FVH (80°-90°)	342.4	1.0			G3/500
BL (0°-30°)	1884.5	5.7	B3/2500		
BM (30°-60°)	2810.7	8.4	B3/5000		
BH (60°-80°)	1202.0	3.6	B3/2500		G3/2500
BVH (80°-90°)	58.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5
2.5°	5014.6	5008.0	5002.2	5012.4	5018.2	5027.7	5041.6	5051.1	5054.0	5062.8	5073.7
5°	5094.9	5094.2	5086.1	5081.7	5069.3	5065.0	5067.9	5079.6	5080.3	5091.2	5125.5
7.5°	5252.5	5251.1	5231.4	5222.6	5196.3	5167.1	5145.2	5147.4	5146.7	5157.7	5203.6
10°	5490.5	5478.8	5451.1	5424.1	5373.0	5318.2	5278.1	5241.6	5241.6	5257.7	5308.8
12.5°	5759.1	5775.2	5737.2	5696.3	5610.9	5512.4	5442.3	5401.5	5397.1	5405.1	5441.6
15°	6092.7	6092.7	6067.1	6008.7	5933.6	5796.3	5651.8	5600.0	5592.7	5609.5	5607.3
17.5°	6468.6	6479.6	6431.4	6402.2	6286.9	6135.0	5954.0	5864.2	5864.2	5853.3	5802.9
20°	6948.2	6888.3	6893.4	6845.2	6760.6	6540.1	6356.2	6225.5	6224.1	6202.2	6060.6
22.5°	7469.3	7436.5	7408.0	7365.7	7248.9	7051.8	6796.3	6667.1	6664.2	6610.2	6400.0
25°	7983.2	8008.0	7976.6	7899.3	7813.9	7599.3	7317.5	7190.5	7189.8	7100.0	6802.2
27.5°	8511.7	8538.7	8528.5	8458.4	8344.5	8176.6	7910.2	7744.5	7734.3	7675.9	7301.4
30°	9095.6	9071.5	9102.9	9073.0	9016.0	8742.3	8501.4	8308.7	8333.6	8316.0	7868.6
32.5°	9520.4	9535.8	9638.7	9641.6	9581.7	9378.8	9084.7	8966.4	9005.8	8982.5	8565.7
35°	9904.4	9929.2	10062.0	10192.7	10236.5	10014.6	9715.3	9708.0	9759.1	9901.4	9526.3
37.5°	10234.3	10251.8	10437.9	10608.0	10749.6	10597.8	10380.3	10639.4	10714.6	11005.8	10517.5
40°	10432.1	10454.7	10695.6	10935.0	11187.6	11133.6	11113.1	11726.3	11797.1	12053.3	11240.9
42.5°	10320.4	10364.9	10766.4	11204.4	11575.9	11683.9	11963.5	12751.8	12832.8	12854.7	11951.8
45°	10121.2	10176.6	10625.5	11334.3	11940.1	12286.8	12819.0	13587.6	13632.1	13570.1	12540.9
47.5°	9906.6	9965.7	10467.1	11295.6	12232.8	12988.3	13583.2	14374.4	14405.8	14215.3	13134.3
50°	9662.8	9717.5	10256.9	11205.1	12453.3	13650.3	14368.6	15054.7	15172.2	14795.6	13595.6
52.5°	9366.4	9424.8	9997.1	11063.5	12646.7	14141.6	15061.3	15823.3	15831.4	15521.1	14115.3
55°	8982.5	9083.9	9670.8	10818.2	12748.2	14563.5	15664.9	16840.1	16891.9	16591.9	14550.3
57.5°	8555.5	8643.8	9278.1	10491.2	12656.9	14883.9	16635.7	17930.6	17924.1	17321.9	14930.6
60°	7991.2	8054.0	8766.4	10063.5	12362.8	15271.5	17646.7	19099.2	19087.6	18037.2	15175.2
62.5°	7267.1	7329.9	8000.0	9392.7	11930.6	15531.4	18332.8	19974.4	19940.8	18557.6	15250.3
65°	6427.7	6540.1	7121.9	8521.9	11166.4	15360.6	18664.2	20489.7	20435.7	18954.7	15070.8
67.5°	5640.9	5736.5	6197.1	7323.3	10038.7	14667.9	18430.6	20622.6	20606.5	19012.4	14563.5
70°	4527.0	4562.0	4983.9	5948.2	8352.5	13184.6	17623.3	20316.0	20323.3	18481.0	13544.5
72.5°	3098.5	3183.9	3371.5	4132.8	6078.1	10485.4	15189.8	18283.9	18285.4	16571.5	11800.7
75°	1666.4	1798.5	2017.5	2394.9	3397.8	6728.5	12198.5	15171.5	15200.0	13816.8	9379.5
77.5°	826.3	873.7	1000.7	1281.0	1557.7	3174.4	7845.2	11388.3	11456.2	10605.8	6397.1
80°	378.1	386.1	395.6	393.4	596.3	1392.7	3367.9	6839.4	6859.8	6308.0	2920.4
82.5°	295.6	294.2	298.5	271.5	273.0	537.2	1165.7	1791.2	1910.2	1503.6	926.3
85°	178.8	178.1	192.0	148.9	183.2	290.5	588.3	714.6	723.4	588.3	479.6
87.5°	67.9	65.7	60.6	53.3	61.3	81.8	203.6	262.8	256.9	182.5	165.7
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°	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5	5063.5
2.5°	5083.2	5106.6	5149.6	5182.5	5193.4	5228.5	5262.0	5267.9	5292.0	5301.5	5332.8
5°	5146.7	5186.1	5253.3	5297.8	5317.5	5375.9	5413.9	5432.8	5426.3	5429.9	5465.0
7.5°	5239.4	5276.6	5330.6	5384.7	5394.2	5404.4	5400.7	5397.8	5372.3	5350.4	5383.2
10°	5324.1	5359.1	5392.7	5400.7	5352.5	5325.5	5277.4	5240.1	5190.5	5167.9	5194.2
12.5°	5443.1	5450.4	5417.5	5373.7	5270.1	5173.7	5095.6	5027.7	4966.4	4924.1	4959.1
15°	5568.6	5540.1	5444.5	5316.8	5156.2	5018.2	4890.5	4777.4	4675.9	4651.1	4660.6
17.5°	5735.0	5657.7	5465.0	5250.4	5000.7	4786.1	4621.9	4478.8	4346.0	4290.5	4285.4
20°	5937.9	5813.1	5506.6	5166.4	4816.8	4531.4	4277.4	4063.5	3880.3	3729.9	3733.6
22.5°	6202.2	6021.2	5569.3	5078.8	4613.1	4232.8	3863.5	3500.0	3198.5	3068.6	3036.5
25°	6551.1	6281.0	5658.4	4999.3	4385.4	3853.3	3331.4	2818.2	2499.3	2373.0	2359.1
27.5°	6985.4	6629.9	5794.2	4910.9	4141.6	3402.9	2652.6	2149.6	1856.9	1724.1	1679.6
30°	7478.8	7059.8	5933.6	4819.0	3846.7	2824.1	2022.6	1529.9	1229.9	1110.9	1095.6
32.5°	8117.5	7604.4	6140.9	4674.4	3416.1	2219.7	1410.9	954.7	751.1	700.0	685.4
35°	9024.8	8340.9	6397.1	4492.0	2862.8	1550.4	874.5	559.1	450.4	424.8	419.7
37.5°	9870.8	9063.5	6655.5	4189.0	2173.7	967.9	500.0	358.4	334.3	335.0	336.5
40°	10541.6	9557.6	6864.2	3790.5	1429.9	549.6	347.4	297.8	298.5	296.3	294.9
42.5°	11138.7	9951.8	6958.4	3201.5	828.5	367.9	301.5	274.5	267.9	270.1	268.6
45°	11632.8	10354.0	6775.9	2539.4	488.3	329.9	284.7	254.7	247.4	259.1	260.6
47.5°	12152.5	10735.7	6496.3	1913.1	396.3	313.9	269.3	240.1	236.5	251.1	252.6
50°	12589.8	11012.4	6019.7	1441.6	378.1	296.3	255.5	225.5	224.8	238.0	238.0
52.5°	12955.5	11179.5	5454.0	1113.1	365.7	281.0	241.6	211.7	211.7	216.1	216.8
55°	13213.1	11146.0	5116.8	875.9	352.6	266.4	227.0	198.5	189.8	186.9	188.3
57.5°	13259.8	11056.9	4725.5	683.2	337.2	252.6	213.9	183.2	167.2	165.0	164.2
60°	13229.9	10861.3	4278.8	570.8	319.7	239.4	200.7	167.2	151.1	146.0	147.4
62.5°	13105.1	10514.6	3762.8	500.7	302.2	229.2	186.1	156.2	141.6	135.0	135.0
65°	12728.4	10018.2	2996.3	438.7	280.3	218.2	174.5	151.8	135.8	128.5	127.0
67.5°	11900.7	8988.3	2251.8	384.7	259.1	206.6	173.0	151.1	132.8	122.6	121.2
70°	10790.5	7721.2	1537.2	338.0	235.8	195.6	172.3	151.8	129.9	116.8	115.3
72.5°	9008.0	6086.9	885.4	294.2	212.4	185.4	169.3	152.6	124.8	108.8	106.6
75°	6768.6	4269.3	519.7	252.6	189.8	170.1	161.3	148.2	116.8	99.3	97.1
77.5°	4070.8	1993.4	391.2	209.5	162.8	149.6	143.8	135.8	106.6	92.0	89.8
80°	1493.4	756.9	307.3	167.9	129.2	129.9	124.1	119.0	97.1	84.7	83.2
82.5°	651.1	462.8	227.0	127.7	101.5	116.1	102.2	97.8	83.2	75.9	73.0
85°	394.9	275.9	146.0	86.9	70.1	78.8	71.5	75.2	64.2	59.9	57.7
87.5°	130.7	82.5	65.0	42.3	35.0	32.8	32.1	38.7	36.5	33.6	33.6
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)