

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: P237550

Luminaire Tested: **CTN-6-3-D-E1-T2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-25)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-6-3-D-E1-T2-7030-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 3000K LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27547 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

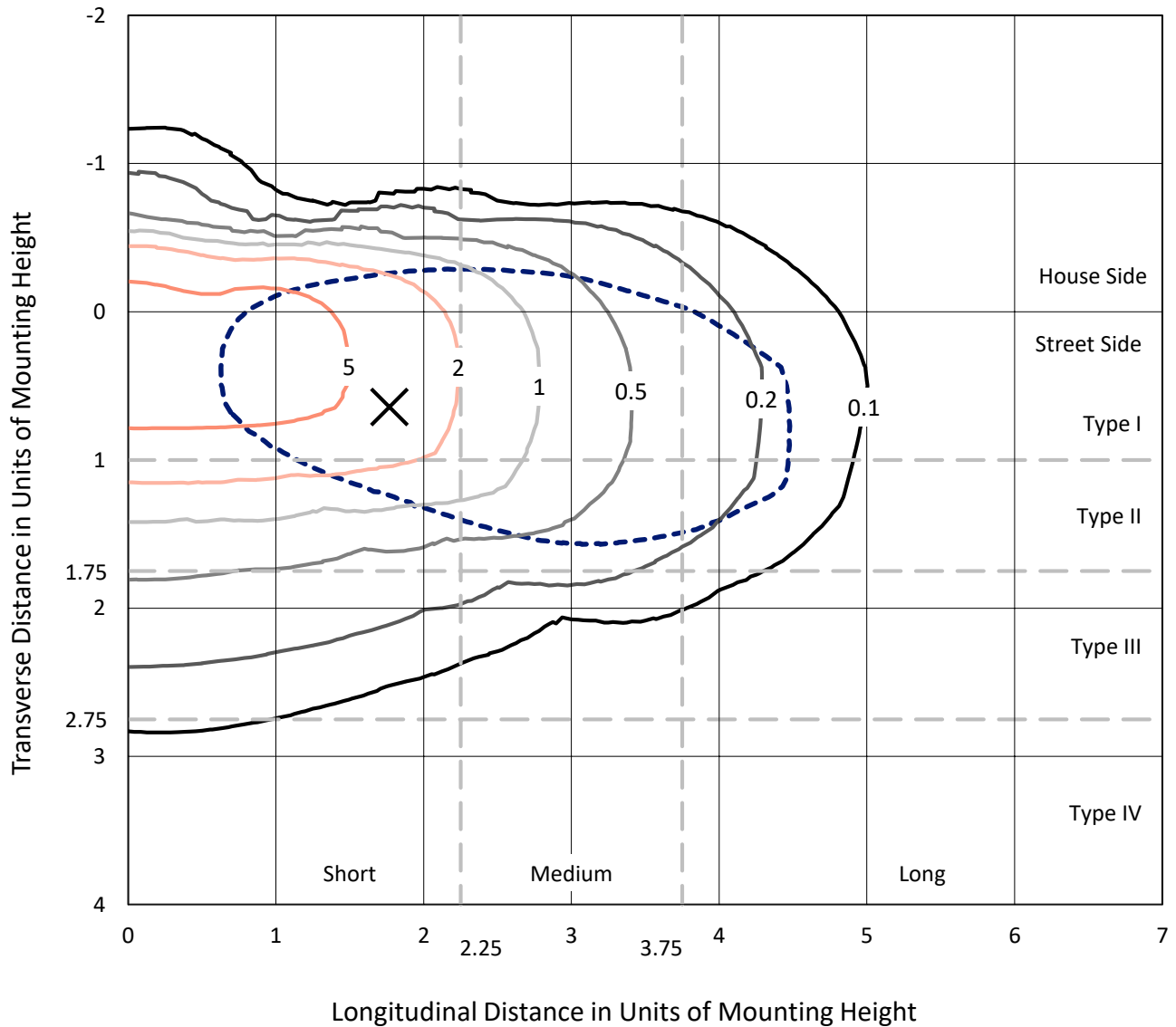
Input Watts (W): 234
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

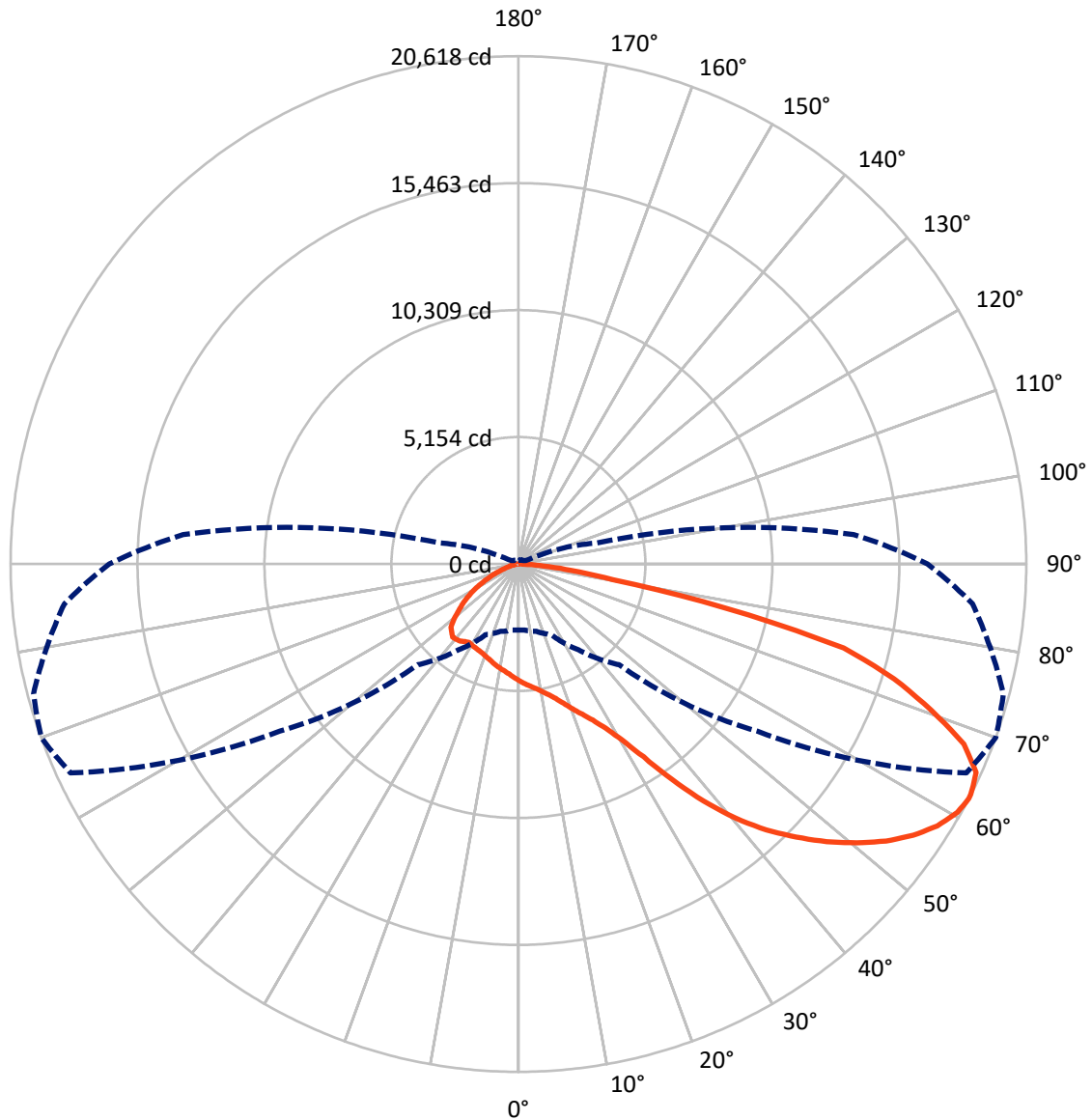
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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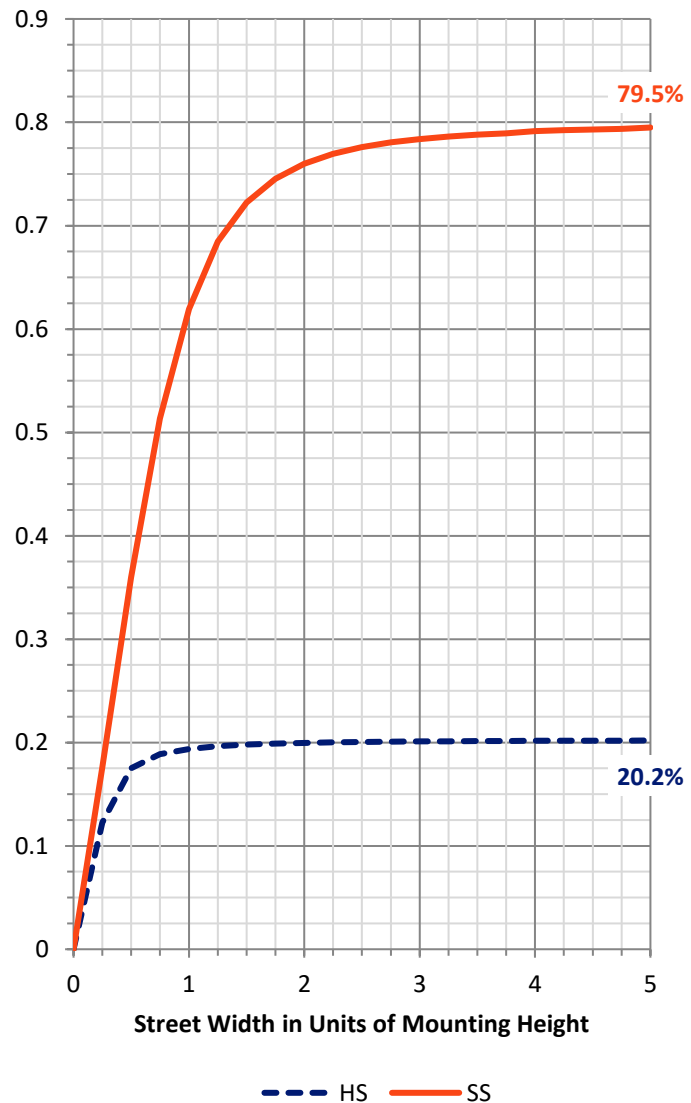
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5635.0	0.0	5635.0
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	21912.0	0.0	21912.0
	% Fixture	79.5	0.0	79.5
Total	Lumens	27547.0	0.0	27547.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.4	1.6
10°-20°	1373.4	5.0
20°-30°	2312.3	8.4
30°-40°	3491.5	12.7
40°-50°	4896.2	17.8
50°-60°	5722.5	20.8
60°-70°	5551.9	20.2
70°-80°	3245.6	11.8
80°-90°	502.0	1.8
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°	27547.0	100.0
0°-180°	27547.0	100.0



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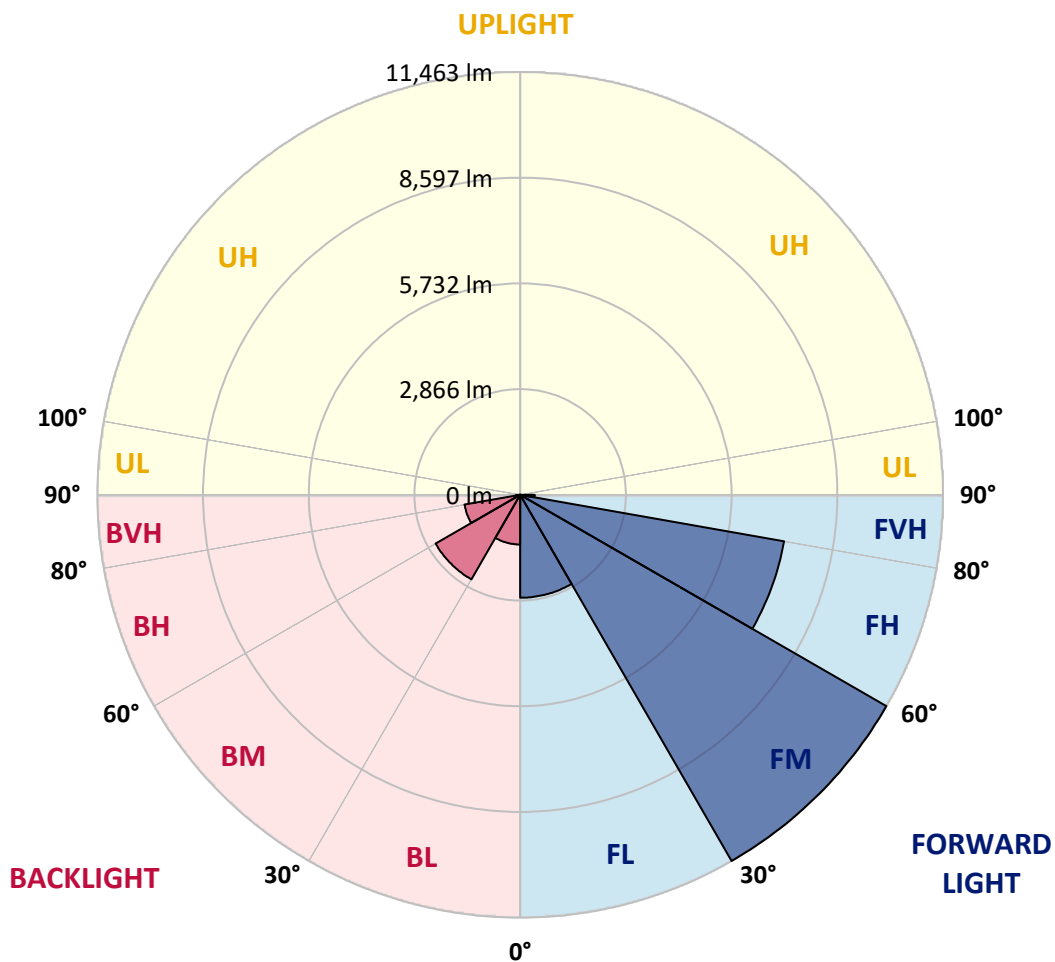
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2789.9	10.1			
FM	(30°-60°)	11463.3	41.6			
FH	(60°-80°)	7265.3	26.4			G3/7500
FVH	(80°-90°)	393.4	1.4			G3/500
BL	(0°-30°)	1347.3	4.9	B3/2500		
BM	(30°-60°)	2646.9	9.6	B3/5000		
BH	(60°-80°)	1532.2	5.6	B3/2500		G3/2500
BVH	(80°-90°)	108.6	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1
2.5°	5143.0	5108.9	5094.3	5115.7	4972.7	4975.6	4906.5	4895.8	4862.7	4816.0	4764.4
5°	5436.9	5397.0	5376.5	5389.2	5238.4	5212.1	5099.2	5043.7	4978.5	4920.1	4808.2
7.5°	5719.1	5678.2	5662.6	5655.8	5473.9	5434.0	5289.9	5191.6	5103.1	5028.2	4876.4
10°	6003.2	5961.4	5929.3	5938.0	5747.3	5676.3	5509.9	5374.6	5260.7	5163.4	4954.2
12.5°	6285.4	6234.8	6199.8	6199.8	6012.0	5942.9	5756.1	5582.8	5437.8	5315.2	5052.5
15°	6574.5	6508.3	6500.5	6500.5	6301.0	6217.3	6033.4	5841.7	5663.6	5506.0	5171.2
17.5°	6873.2	6789.5	6787.6	6800.2	6617.3	6522.9	6349.7	6170.6	5943.9	5744.4	5316.2
20°	7069.8	6994.9	6977.3	7015.3	6871.3	6810.0	6624.1	6498.6	6280.6	6043.1	5503.0
22.5°	7219.6	7173.9	7190.5	7252.7	7182.7	7130.1	6934.5	6821.6	6625.1	6381.8	5755.1
25°	7370.5	7340.3	7378.3	7488.2	7494.1	7508.7	7345.2	7201.2	7018.2	6801.2	6083.0
27.5°	7323.8	7315.0	7429.8	7656.6	7781.1	7847.3	7755.8	7705.2	7537.9	7309.2	6495.6
30°	7357.8	7336.4	7474.6	7761.7	8039.0	8230.7	8230.7	8345.6	8272.6	8042.9	7125.3
32.5°	7256.6	7216.7	7375.3	7787.0	8263.8	8636.5	8802.0	9208.7	9336.2	9253.5	8373.8
35°	6790.5	6820.7	7131.1	7685.8	8418.5	9033.6	9471.5	10343.4	10735.6	10829.0	9811.1
37.5°	6499.5	6512.2	6828.4	7520.3	8473.0	9423.8	10204.2	11653.2	12208.9	12266.3	11072.3
40°	6098.6	6146.3	6500.5	7298.5	8441.9	9753.7	10993.4	12944.6	13562.5	13514.8	12175.8
42.5°	5782.3	5796.0	6105.4	6946.2	8305.7	10016.4	11789.5	14117.2	14764.3	14631.0	13266.7
45°	5388.2	5413.5	5706.4	6508.3	8063.3	10149.7	12476.5	15216.8	15809.5	15643.1	14211.6
47.5°	4911.4	5022.3	5328.9	6036.3	7652.7	10136.1	13058.4	16168.5	16844.9	16588.9	15095.2
50°	3955.8	4091.0	4704.1	5611.1	7114.5	9945.4	13521.6	17216.6	17795.6	17537.7	15901.9
52.5°	3455.6	3481.9	3794.2	5133.3	6484.0	9519.2	13836.9	18082.7	18686.0	18414.5	16677.5
55°	3229.8	3257.1	3414.7	4359.6	5904.9	8764.0	13952.7	18908.9	19444.1	19132.7	17316.8
57.5°	3032.3	3041.0	3226.9	3687.2	5353.2	7769.5	13708.5	19597.9	20056.2	19632.9	17760.6
60°	2806.5	2841.5	3024.5	3366.1	4731.4	6614.4	12871.6	20038.7	20471.7	20095.1	18220.9
62°	2680.0	2688.8	2831.8	3166.6	4249.7	5779.4	11829.4	20064.0	20617.7	20379.3	18504.1
62.5°	2643.0	2648.9	2784.1	3116.0	4150.4	5614.0	11545.2	20043.5	20608.9	20428.9	18566.3
65°	2430.9	2444.5	2566.1	2876.6	3715.4	4968.8	10214.0	19709.8	20421.1	20345.2	18560.5
67.5°	2173.0	2176.9	2306.3	2585.6	3266.8	4362.5	8579.1	19071.4	19501.5	19403.2	17747.9
70°	1776.9	1848.0	1989.1	2235.3	2702.4	3619.1	6525.8	17083.3	17788.8	17886.1	16292.1
72.5°	1350.7	1345.8	1395.5	1566.7	1968.6	2780.2	4405.4	14313.8	15948.6	16475.1	14685.5
75°	834.0	866.1	1074.3	1211.5	1411.0	1960.9	2761.7	9963.9	13637.4	14547.3	12980.6
77.5°	648.1	653.9	762.0	999.4	1156.1	1389.6	1722.4	5429.1	8548.9	10811.5	10109.8
80°	493.4	504.1	575.1	626.7	813.5	846.6	1149.3	2808.5	3893.5	5453.4	6791.5
82.5°	297.8	314.3	380.5	410.7	448.6	424.3	617.9	1515.2	2158.4	2790.9	3458.5
85°	149.9	180.0	253.0	239.4	203.4	187.8	264.7	732.8	1031.5	1365.3	1587.2
87.5°	38.0	45.7	59.4	71.0	60.3	49.6	72.0	198.5	204.4	195.6	547.9
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°	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1	4739.1
2.5°	4746.9	4707.0	4634.0	4592.2	4488.1	4448.2	4373.2	4400.5	4383.9	4367.4	4368.4
5°	4754.7	4682.7	4543.5	4443.3	4292.5	4215.6	4117.3	4101.7	4058.9	4032.6	4035.6
7.5°	4771.3	4668.1	4471.5	4311.9	4099.8	3979.1	3847.8	3825.4	3761.1	3732.0	3735.8
10°	4813.1	4691.5	4424.8	4190.3	3950.9	3783.5	3629.8	3580.1	3518.8	3485.7	3483.8
12.5°	4877.3	4726.5	4358.6	4097.8	3806.9	3589.9	3412.8	3333.0	3245.4	3216.2	3219.1
15°	4979.5	4771.3	4303.2	3970.4	3632.7	3406.9	3188.0	3091.6	2999.2	2965.1	2962.2
17.5°	5104.1	4812.1	4264.3	3820.5	3481.9	3211.3	3018.6	2887.3	2731.6	2709.2	2684.9
20°	5227.7	4893.9	4229.2	3711.5	3302.8	3014.8	2762.7	2628.4	2405.6	2321.9	2291.7
22.5°	5407.7	5023.3	4224.4	3582.1	3122.8	2799.7	2460.1	2243.1	1997.8	1855.8	1824.6
25°	5648.0	5165.4	4237.0	3483.8	2921.3	2526.2	2067.9	1754.6	1521.0	1360.4	1327.3
27.5°	5960.4	5359.0	4275.0	3375.8	2738.4	2198.3	1628.0	1305.9	1108.4	974.1	943.0
30°	6420.7	5684.0	4334.3	3275.6	2471.7	1771.1	1196.9	941.0	787.3	704.5	703.6
32.5°	7495.0	6410.0	4368.4	3151.0	2223.6	1339.0	861.2	681.2	558.6	527.4	553.7
35°	8727.0	7438.6	4631.1	3016.7	1835.3	984.8	615.0	484.6	434.0	441.8	456.4
37.5°	9863.6	8427.3	5032.1	2798.7	1469.4	693.8	441.8	385.4	374.7	402.9	429.2
40°	10869.9	9281.7	5375.6	2559.3	1039.3	484.6	354.2	356.2	345.5	358.1	366.9
42.5°	11856.6	10073.8	5738.5	2237.2	692.9	358.1	320.2	337.7	325.0	327.0	314.3
45°	12837.5	10909.8	5895.2	1839.2	464.2	310.4	299.7	320.2	319.2	311.4	292.9
47.5°	13684.1	11485.8	6093.7	1387.7	345.5	282.2	285.1	299.7	309.5	295.8	287.1
50°	14412.0	12097.0	5941.0	918.6	308.5	263.7	274.4	274.4	290.0	266.6	255.9
52.5°	15107.8	12705.2	5548.8	605.3	283.2	251.1	261.8	255.0	261.8	238.4	235.5
55°	15525.3	13019.5	5074.9	472.0	267.6	240.4	245.2	243.3	237.4	213.1	218.0
57.5°	15984.6	13381.5	4485.2	396.1	260.8	227.7	228.7	225.8	208.2	191.7	192.7
60°	16351.5	13652.0	3854.6	349.4	253.0	220.9	207.3	202.4	178.1	168.4	169.3
62°	16608.4	13664.7	3304.7	325.0	243.3	216.0	194.6	183.9	156.7	148.9	147.9
62.5°	16636.6	13617.0	3170.5	319.2	239.4	214.1	193.7	178.1	150.8	145.0	143.1
65°	16531.5	13086.6	2529.2	287.1	222.8	202.4	180.0	154.7	129.4	121.6	118.7
67.5°	15749.1	12136.9	1931.7	260.8	202.4	194.6	166.4	136.2	114.8	105.1	103.2
70°	14223.3	10851.4	1378.9	227.7	182.0	177.1	167.4	124.6	106.1	92.4	90.5
72.5°	12528.1	9483.1	938.1	202.4	161.5	146.0	123.6	117.7	99.3	81.7	79.8
75°	10661.6	7552.5	667.6	174.2	139.2	123.6	104.1	109.0	93.4	73.0	71.0
77.5°	8180.1	5554.6	495.3	143.1	108.0	100.2	87.6	96.3	84.7	66.2	65.2
80°	5585.8	3836.1	352.3	108.0	71.0	71.0	74.0	82.7	74.9	59.4	58.4
82.5°	3140.3	2019.2	208.2	77.9	48.7	48.7	57.4	67.1	62.3	51.6	50.6
85°	1301.1	730.8	110.0	48.7	32.1	33.1	40.9	49.6	48.7	40.9	39.9
87.5°	452.5	183.9	32.1	16.5	13.6	14.6	16.5	23.4	23.4	20.4	21.4
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)