

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: P237542

Luminaire Tested: **CTN-6-3-D-E1-T3-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-26)
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-T3-7050-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 5000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29154 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

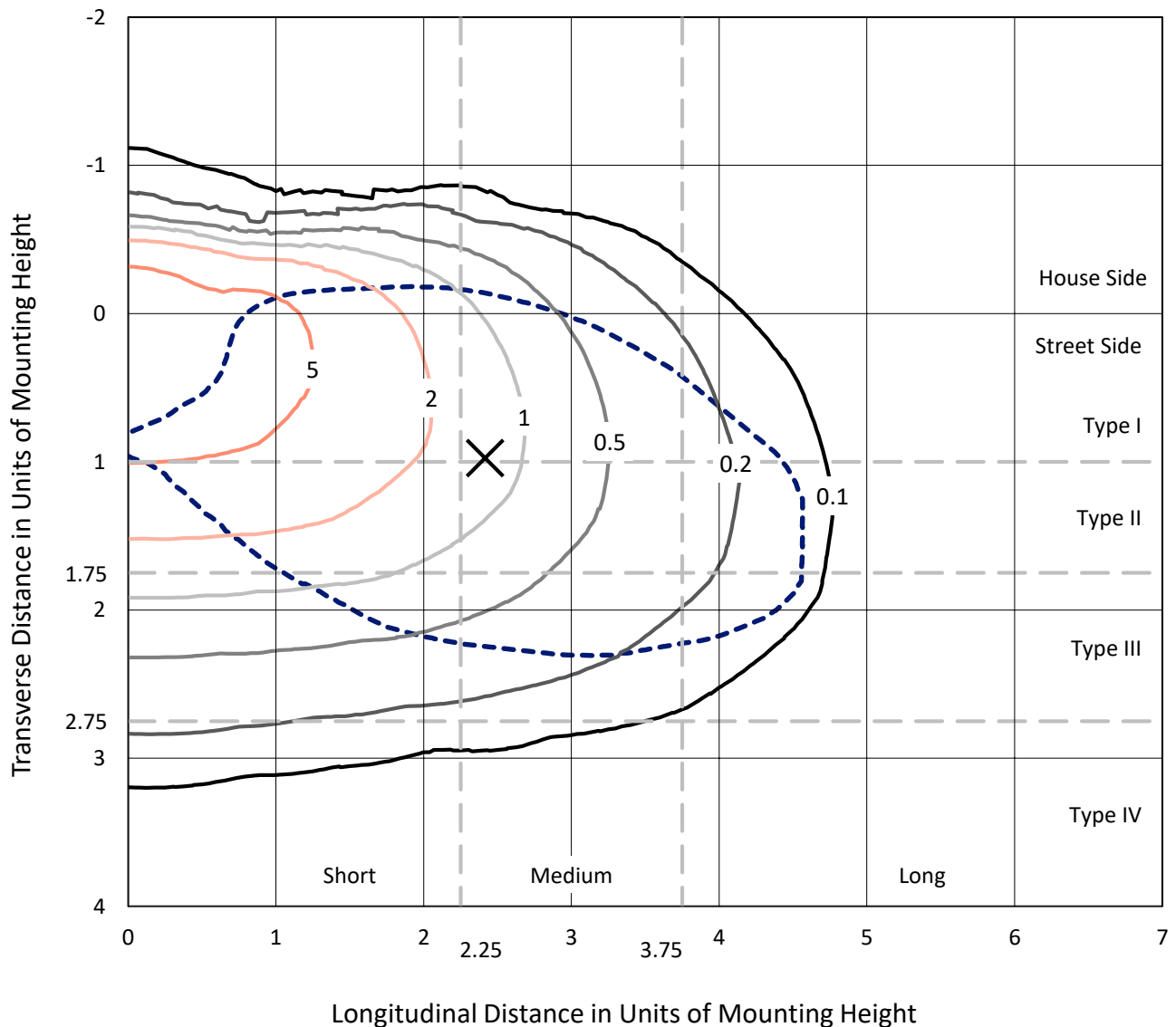
Input Watts (W): 234
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

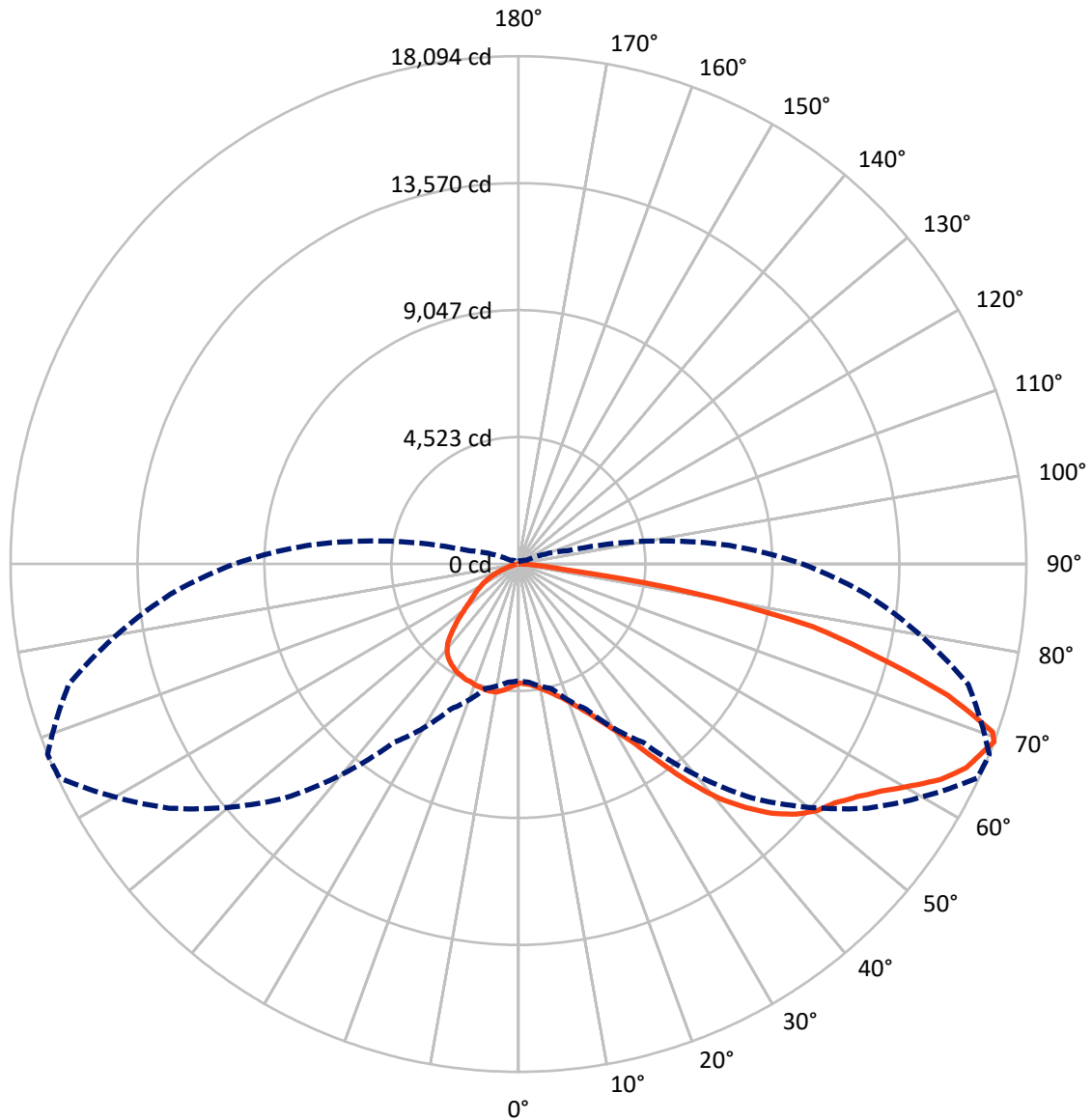
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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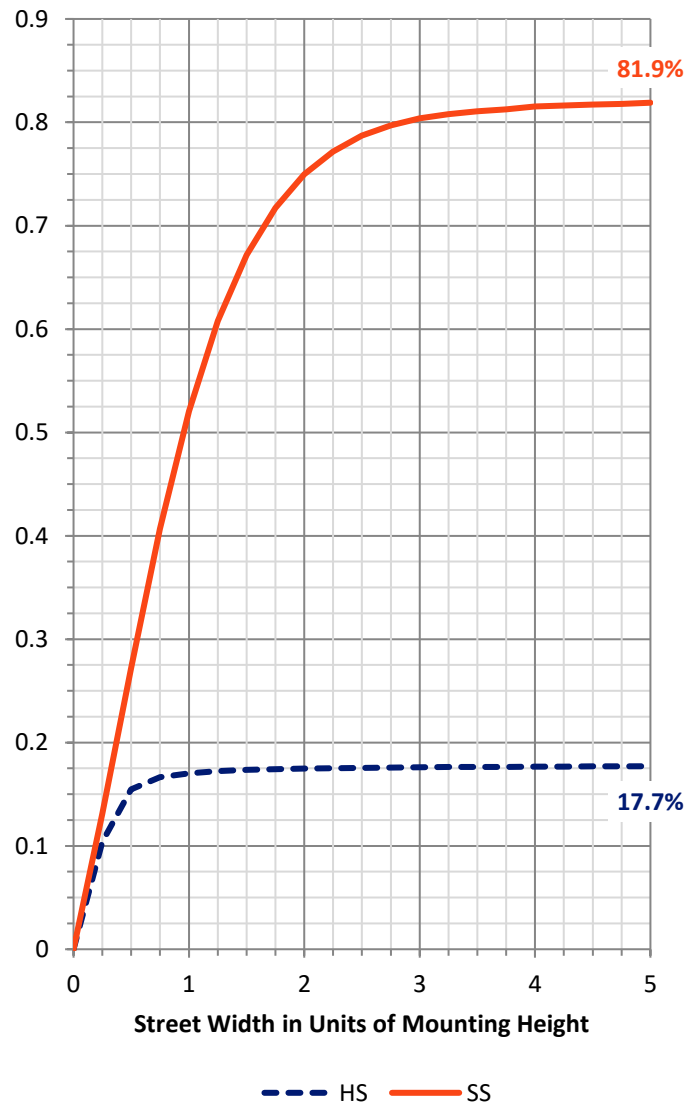
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5232.1	0.0	5232.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	23921.9	0.0	23921.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	29154.0	0.0	29154.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.9	1.5
10°-20°	1336.4	4.6
20°-30°	2284.4	7.8
30°-40°	3520.0	12.1
40°-50°	5051.4	17.3
50°-60°	6079.6	20.9
60°-70°	6380.0	21.9
70°-80°	3696.1	12.7
80°-90°	380.3	1.3
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°	29154.0	100.0
0°-180°	29154.0	100.0

Coefficient of Utilization



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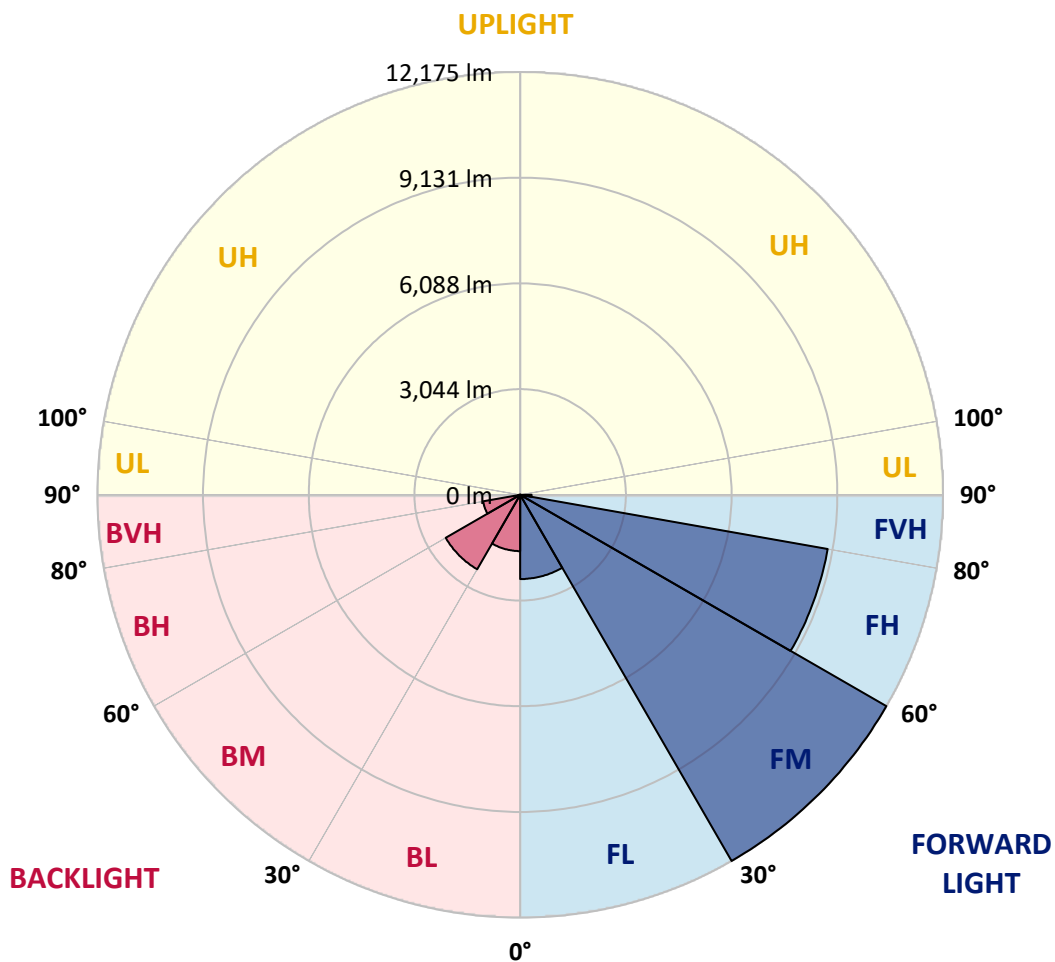
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2425.5	8.3			
FM	(30°-60°)	12175.1	41.8			
FH	(60°-80°)	8990.8	30.8			G4/12000
FVH	(80°-90°)	330.5	1.1			G3/500
BL	(0°-30°)	1621.2	5.6	B3/2500		
BM	(30°-60°)	2475.8	8.5	B2/2500		
BH	(60°-80°)	1085.3	3.7	B3/2500		G3/2500
BVH	(80°-90°)	49.8	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6
2.5°	4288.1	4253.7	4257.8	4285.0	4204.2	4238.6	4217.4	4261.8	4268.9	4247.7	4266.9
5°	4372.9	4343.6	4342.6	4369.9	4280.0	4306.3	4272.9	4303.2	4312.3	4290.1	4323.4
7.5°	4537.6	4506.3	4500.2	4527.5	4413.3	4421.4	4376.0	4391.1	4399.2	4368.9	4402.2
10°	4774.0	4739.6	4717.4	4732.5	4604.3	4584.1	4506.3	4504.2	4516.4	4475.0	4528.5
12.5°	5038.6	4998.2	4965.9	4968.9	4822.4	4788.1	4685.1	4648.7	4656.8	4601.2	4665.9
15°	5326.5	5267.9	5237.6	5238.6	5074.0	5016.4	4884.1	4824.5	4819.4	4765.9	4803.3
17.5°	5673.0	5625.5	5587.1	5566.9	5392.2	5278.0	5120.4	5042.7	5014.4	4979.0	4959.8
20°	6080.1	6020.5	5980.1	5973.0	5758.9	5607.3	5398.2	5295.2	5261.9	5232.6	5146.7
22.5°	6533.6	6473.0	6417.5	6408.4	6181.1	5998.3	5717.4	5590.2	5560.9	5527.5	5355.8
25°	6951.8	6944.8	6883.1	6873.0	6653.8	6416.5	6087.2	5924.5	5924.5	5885.1	5621.5
27.5°	7418.5	7428.6	7373.1	7360.9	7154.9	6892.2	6500.3	6344.7	6377.1	6306.4	5955.8
30°	7910.5	7889.3	7874.1	7887.2	7696.3	7418.5	7010.4	6879.1	6929.6	6848.8	6404.3
32.5°	8350.9	8334.7	8344.8	8395.3	8258.0	8001.4	7650.9	7569.0	7617.5	7668.0	7208.4
35°	8699.4	8665.0	8792.3	8903.4	8864.0	8620.6	8338.8	8511.5	8644.8	8875.2	8393.3
37.5°	9006.5	8981.2	9135.8	9363.1	9412.6	9277.2	9190.3	9672.2	9824.7	10134.8	9432.8
40°	9160.0	9155.0	9344.9	9640.9	9841.9	9929.8	10082.3	10738.9	10961.1	11046.0	10223.7
42.5°	9110.5	9126.7	9462.1	9918.6	10243.9	10620.7	10927.8	11650.0	11854.1	11784.4	10916.7
45°	8972.1	8980.2	9320.6	10032.8	10592.4	11330.8	11740.9	12494.5	12675.3	12429.9	11468.2
47.5°	8780.2	8783.2	9142.8	9954.0	10877.3	11973.3	12442.0	13169.3	13315.8	12969.3	11865.2
50°	8520.6	8525.6	8955.0	9855.0	11122.7	12499.6	12990.5	13692.6	13805.7	13352.1	12208.6
52.5°	8192.3	8236.7	8706.5	9696.4	11276.3	12873.3	13405.7	14076.4	14132.0	13809.7	12512.7
55°	7813.5	7860.0	8390.3	9481.2	11335.9	13085.5	13696.6	14549.2	14638.1	14320.9	12760.2
57.5°	7365.0	7428.6	7987.2	9131.7	11196.5	13174.3	13992.6	15133.0	15253.2	14855.2	13014.7
60°	6844.8	6923.6	7511.5	8695.4	10874.2	13268.3	14546.1	15915.9	16055.3	15430.0	13237.0
62.5°	6301.3	6351.8	6883.1	8100.4	10358.1	13341.0	15142.1	16880.6	16892.7	15934.1	13360.2
65°	5574.0	5627.5	6103.3	7348.8	9583.3	13109.7	15443.1	17557.4	17521.0	16329.0	13318.8
67.5°	4741.6	4792.1	5181.0	6414.4	8519.6	12461.2	15340.1	17827.1	17851.3	16615.9	12921.8
69°	4163.8	4230.5	4597.2	5704.3	7768.0	11797.5	15167.4	18037.2	18093.8	16589.7	12462.2
70°	3669.9	3755.7	4104.2	5077.0	7131.6	11194.5	14834.0	17918.0	17922.0	16324.0	12038.9
72.5°	2397.1	2449.6	2510.2	3294.1	5130.5	8871.1	13126.9	15890.6	15995.7	14566.3	10525.7
75°	1185.9	1232.4	1458.7	1742.5	2638.5	5942.7	10407.6	13018.8	13217.8	12370.3	8623.6
77.5°	654.6	663.7	743.5	1141.5	1367.7	2687.0	7113.5	10378.3	10726.8	10081.3	6193.2
80°	408.1	406.1	424.3	531.3	766.7	1273.8	3004.2	5824.5	6450.8	5263.9	2447.6
82.5°	318.2	312.1	313.1	343.5	324.3	600.0	1250.6	1696.0	1711.2	1519.3	952.6
85°	162.6	183.8	218.2	228.3	191.9	326.3	575.8	669.7	685.9	601.0	496.0
87.5°	54.5	55.6	58.6	57.6	51.5	112.1	213.1	248.5	221.2	125.3	169.7
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°	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6	4240.6
2.5°	4296.2	4287.1	4305.2	4346.7	4312.3	4343.6	4312.3	4417.4	4405.3	4398.2	4418.4
5°	4355.8	4354.7	4384.0	4450.7	4447.7	4503.2	4472.9	4577.0	4561.8	4559.8	4578.0
7.5°	4436.6	4455.8	4487.1	4555.8	4556.8	4602.2	4567.9	4649.7	4616.4	4608.3	4633.5
10°	4559.8	4564.9	4589.1	4636.6	4569.9	4590.1	4533.5	4598.2	4551.7	4546.7	4584.1
12.5°	4678.0	4685.1	4648.7	4633.5	4547.7	4521.4	4422.4	4456.8	4403.2	4398.2	4416.4
15°	4804.3	4756.8	4669.9	4620.4	4471.9	4377.0	4265.9	4198.2	4106.3	4063.8	4080.0
17.5°	4935.6	4843.7	4681.0	4560.8	4361.8	4223.4	4002.2	3887.0	3750.7	3681.0	3667.8
20°	5079.0	4949.7	4708.3	4530.5	4250.7	3978.0	3708.3	3444.6	3289.0	3217.3	3198.1
22.5°	5240.6	5083.1	4746.7	4429.5	4077.0	3745.6	3290.1	2957.7	2731.4	2661.7	2642.5
25°	5442.7	5232.6	4799.2	4404.2	3910.3	3365.8	2799.1	2422.3	2158.7	2052.6	2030.4
27.5°	5688.1	5438.6	4885.1	4284.0	3617.3	2942.6	2311.2	1877.9	1604.1	1478.9	1451.6
30°	6045.7	5702.3	4942.7	4213.3	3356.7	2503.1	1796.0	1312.2	1052.6	960.7	936.4
32.5°	6750.8	6154.8	5059.8	4050.7	2971.9	1992.0	1236.4	805.1	623.3	570.7	550.5
35°	7798.3	7007.4	5228.5	3857.8	2539.5	1417.2	734.4	466.7	374.8	355.6	349.5
37.5°	8752.9	7848.8	5554.8	3560.8	1971.8	871.8	425.3	299.0	275.8	278.8	278.8
40°	9473.2	8474.1	5935.6	3168.8	1337.4	488.9	291.9	248.5	253.5	254.6	253.5
42.5°	10147.9	9046.9	6119.5	2736.5	774.8	324.3	253.5	231.3	235.4	232.3	230.3
45°	10678.3	9457.0	6174.0	2154.6	424.3	289.9	238.4	215.2	213.1	215.2	217.2
47.5°	11022.7	9707.5	6049.8	1649.6	320.2	269.7	229.3	204.0	199.0	213.1	212.1
50°	11278.3	9879.2	5567.9	1254.6	312.1	252.5	218.2	190.9	192.9	210.1	208.1
52.5°	11464.2	9923.7	5039.6	1006.1	298.0	240.4	208.1	184.9	182.8	196.0	197.0
55°	11611.6	9804.5	4710.3	792.0	285.9	228.3	200.0	178.8	168.7	172.7	171.7
57.5°	11703.6	9668.1	4334.5	660.6	274.8	215.2	188.9	162.6	147.5	148.5	147.5
60°	11683.4	9577.2	3903.2	541.4	260.6	203.0	173.7	145.5	130.3	126.3	126.3
62.5°	11643.0	9390.3	3457.7	471.7	248.5	199.0	155.6	132.3	121.2	117.2	117.2
65°	11368.2	8944.9	2861.7	404.1	236.4	187.9	145.5	127.3	114.1	110.1	110.1
67.5°	10686.4	8208.5	2216.3	351.5	227.3	169.7	142.4	124.2	110.1	105.1	105.1
69°	10110.6	7553.9	1820.3	323.2	218.2	161.6	142.4	125.3	108.1	102.0	102.0
70°	9661.1	7039.7	1506.1	306.1	209.1	156.6	142.4	126.3	107.1	100.0	99.0
72.5°	8290.3	5496.2	836.4	259.6	173.7	142.4	139.4	127.3	102.0	91.9	90.9
75°	6360.9	3863.8	498.0	219.2	146.5	130.3	132.3	122.2	93.9	82.8	82.8
77.5°	3974.9	1774.8	370.7	171.7	119.2	113.1	115.2	108.1	84.9	75.8	75.8
80°	1357.6	801.0	279.8	132.3	85.9	87.9	95.0	90.9	75.8	68.7	67.7
82.5°	743.5	521.2	198.0	91.9	59.6	72.7	72.7	73.7	65.7	60.6	59.6
85°	404.1	271.7	122.2	55.6	42.4	53.5	51.5	55.6	53.5	49.5	48.5
87.5°	140.4	92.9	40.4	20.2	17.2	18.2	21.2	28.3	27.3	28.3	29.3
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)