

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: P237566

Luminaire Tested: **CTN-6-3-D-E1-T2-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237566
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-T2-7050-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 5000K LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28596 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

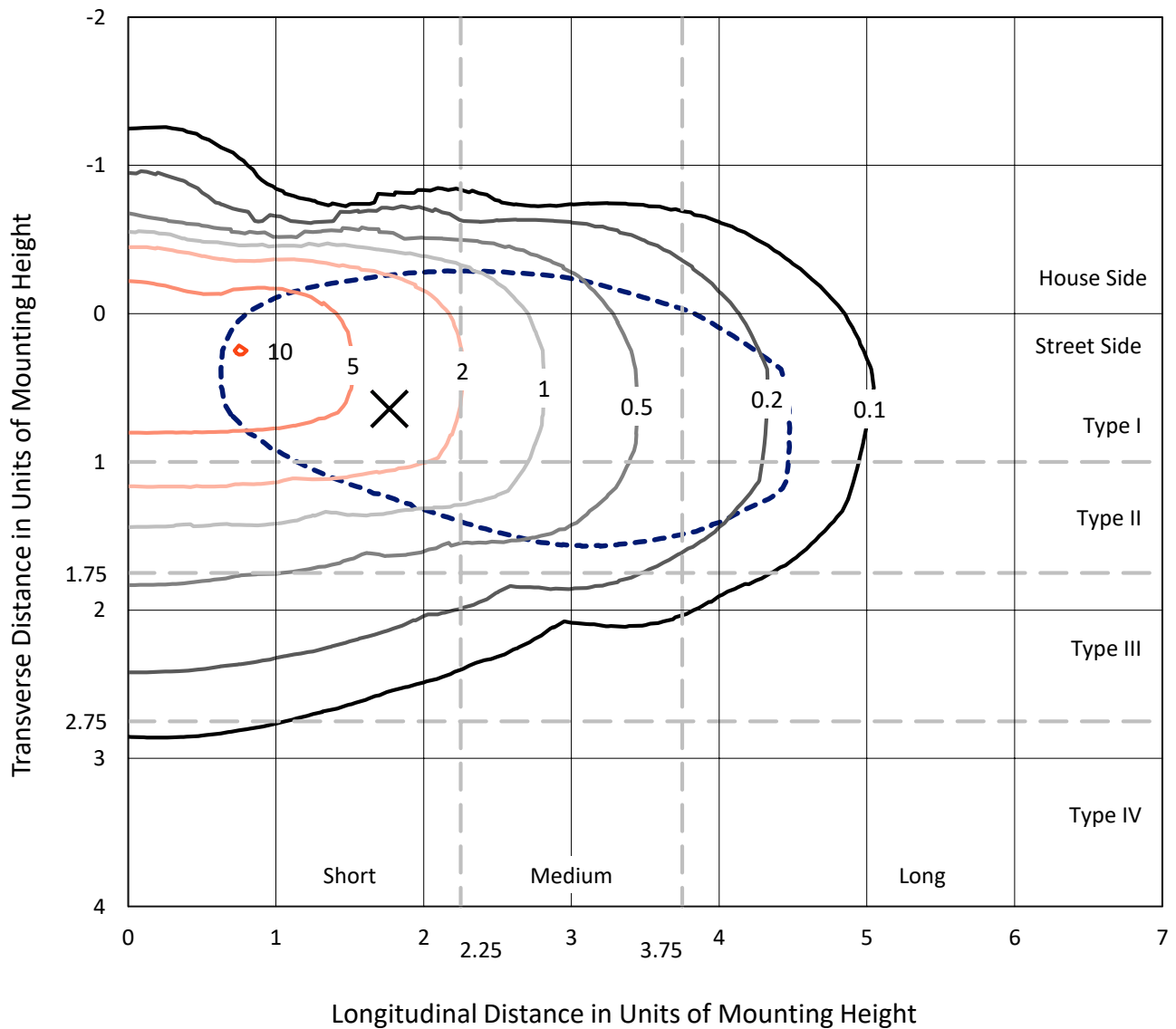
Input Watts (W): 234
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

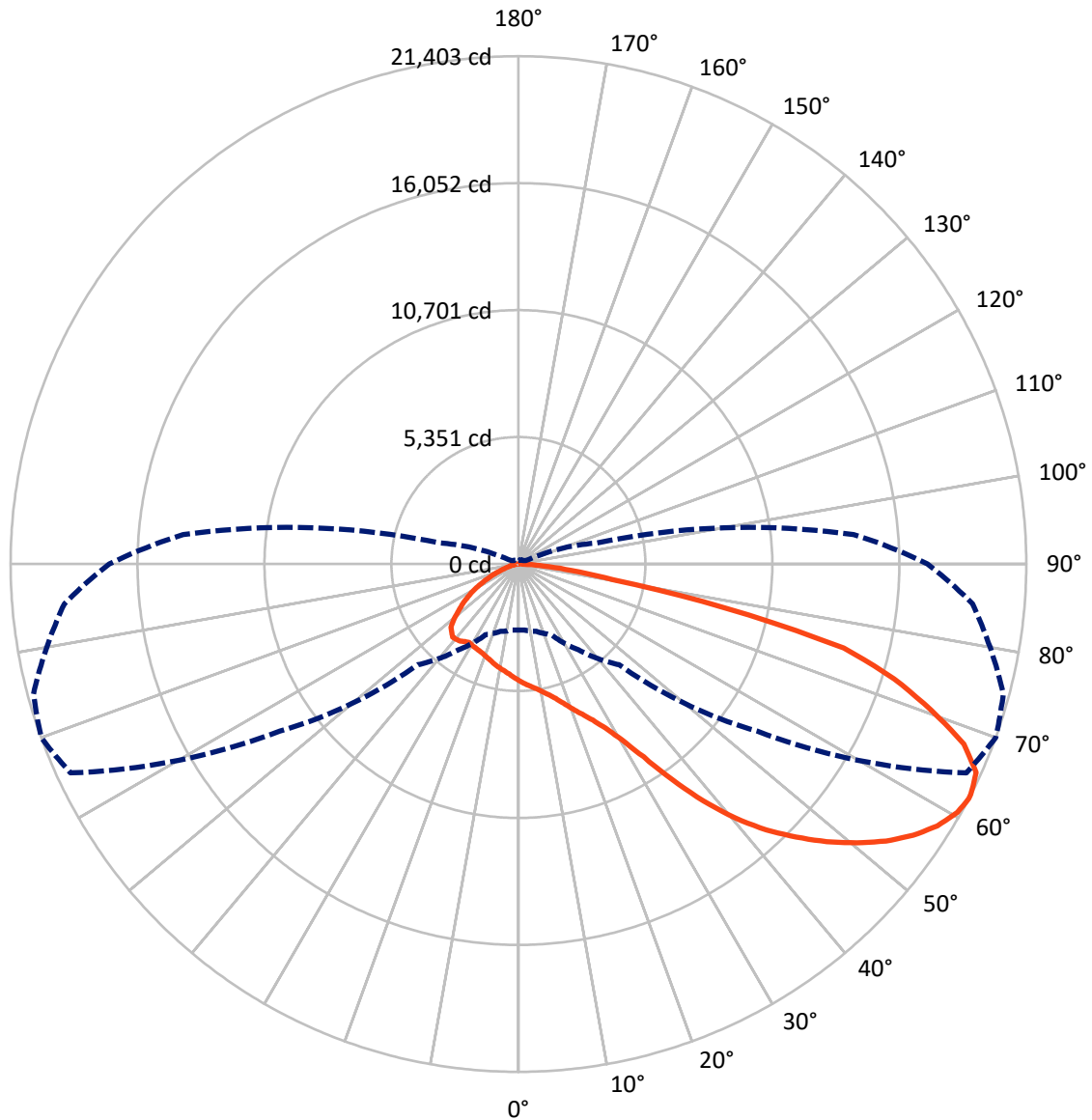
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 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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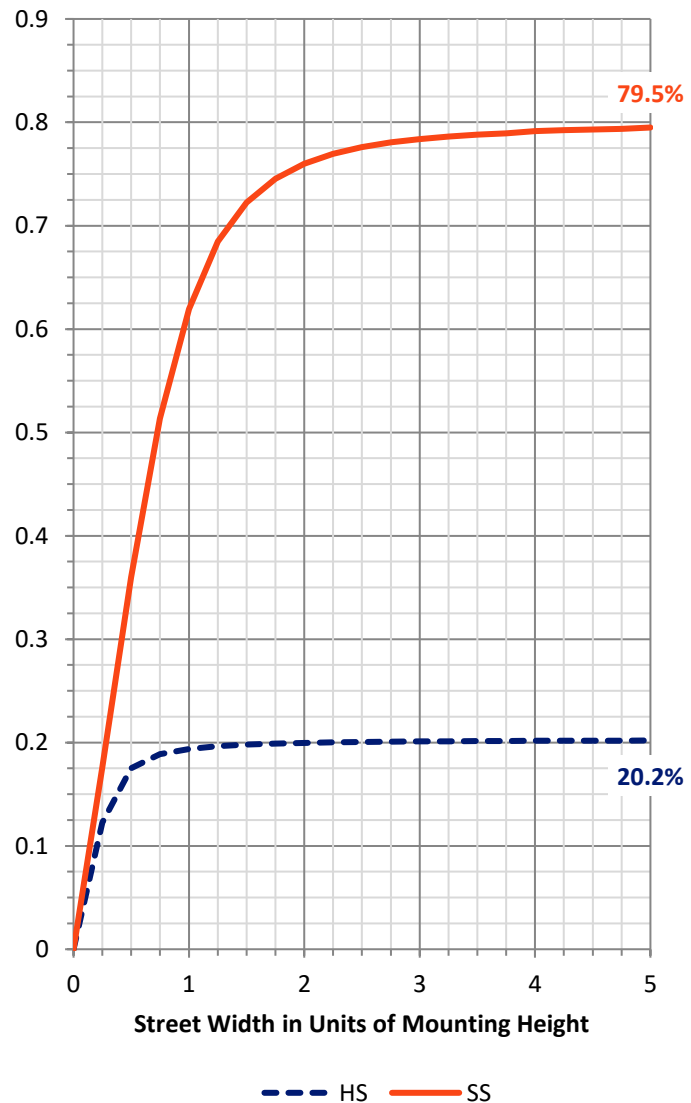
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5849.6	0.0	5849.6
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	22746.4	0.0	22746.4
	% Fixture	79.5	0.0	79.5
Total	Lumens	28596.0	0.0	28596.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.6	1.6
10°-20°	1425.7	5.0
20°-30°	2400.4	8.4
30°-40°	3624.5	12.7
40°-50°	5082.7	17.8
50°-60°	5940.4	20.8
60°-70°	5763.3	20.2
70°-80°	3369.2	11.8
80°-90°	521.2	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°	28596.0	100.0
0°-180°	28596.0	100.0



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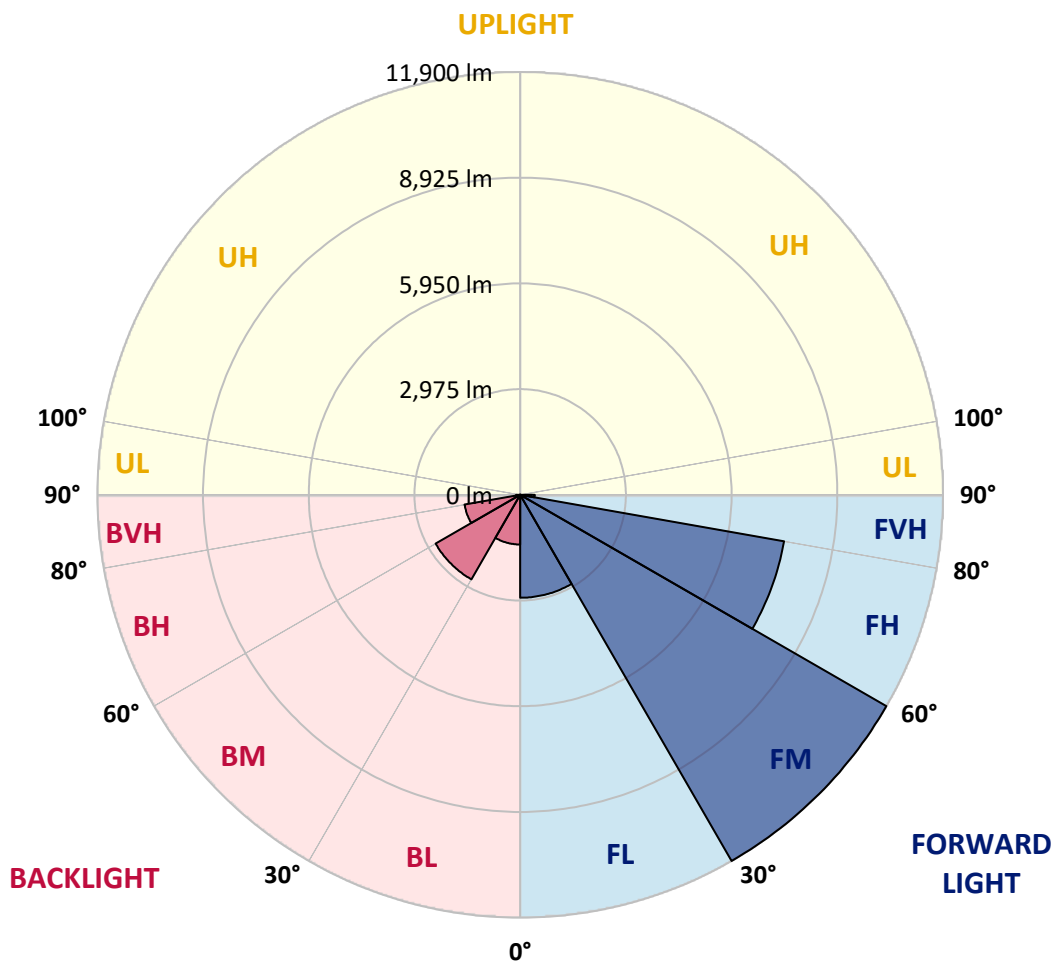
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2896.2	10.1			
FM	(30°-60°)	11899.8	41.6			
FH	(60°-80°)	7542.0	26.4			G4/12000
FVH	(80°-90°)	408.4	1.4			G3/500
BL	(0°-30°)	1398.6	4.9	B3/2500		
BM	(30°-60°)	2747.7	9.6	B3/5000		
BH	(60°-80°)	1590.5	5.6	B3/2500		G3/2500
BVH	(80°-90°)	112.7	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-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6
2.5°	5338.8	5303.5	5288.3	5310.6	5162.1	5165.1	5093.4	5082.2	5047.9	4999.4	4945.9
5°	5643.9	5602.5	5581.3	5594.4	5437.8	5410.6	5293.4	5235.8	5168.1	5107.5	4991.3
7.5°	5936.9	5894.4	5878.3	5871.2	5682.3	5640.9	5491.4	5389.3	5297.4	5219.6	5062.0
10°	6231.8	6188.4	6155.1	6164.2	5966.2	5892.4	5719.7	5579.3	5461.1	5360.0	5142.9
12.5°	6524.8	6472.3	6435.9	6435.9	6240.9	6169.2	5975.3	5795.4	5644.9	5517.6	5244.9
15°	6824.8	6756.1	6748.0	6748.0	6541.0	6454.1	6263.2	6064.1	5879.3	5715.6	5368.1
17.5°	7134.9	7048.1	7046.1	7059.2	6869.3	6771.3	6591.5	6405.6	6170.2	5963.1	5518.6
20°	7339.0	7261.2	7243.0	7282.4	7132.9	7069.3	6876.3	6746.0	6519.7	6273.3	5712.6
22.5°	7494.6	7447.1	7464.3	7528.9	7456.2	7401.6	7198.6	7081.4	6877.3	6624.8	5974.2
25°	7651.2	7619.8	7659.2	7773.4	7779.4	7794.6	7624.9	7475.4	7285.5	7060.2	6314.7
27.5°	7602.7	7593.6	7712.8	7948.1	8077.5	8146.1	8051.2	7998.7	7824.9	7587.5	6743.0
30°	7638.0	7615.8	7759.2	8057.2	8345.2	8544.2	8544.2	8663.4	8587.6	8349.2	7396.6
32.5°	7533.0	7491.5	7656.2	8083.5	8578.5	8965.4	9137.1	9559.4	9691.7	9605.9	8692.7
35°	7049.1	7080.4	7402.6	7978.5	8739.1	9377.6	9832.1	10737.3	11144.4	11241.4	10184.7
37.5°	6747.0	6760.2	7088.5	7806.7	8795.7	9782.6	10592.8	12097.0	12673.8	12733.4	11493.9
40°	6330.8	6380.3	6748.0	7576.4	8763.4	10125.1	11412.1	13437.5	14079.0	14029.5	12639.5
42.5°	6002.5	6016.7	6337.9	7210.7	8621.9	10397.8	12238.4	14654.8	15326.5	15188.2	13771.9
45°	5593.4	5619.7	5923.7	6756.1	8370.4	10536.2	12951.6	15796.3	16411.5	16238.7	14752.8
47.5°	5098.4	5213.6	5531.8	6266.2	7944.1	10522.1	13555.7	16784.2	17486.3	17220.6	15670.0
50°	4106.4	4246.8	4883.2	5824.7	7385.5	10324.1	14036.5	17872.2	18473.3	18205.6	16507.5
52.5°	3587.2	3614.4	3938.7	5328.7	6730.9	9881.6	14363.8	18771.3	19397.6	19115.8	17312.6
55°	3352.8	3381.1	3544.7	4525.6	6129.8	9097.7	14484.1	19628.9	20184.5	19861.3	17976.3
57.5°	3147.7	3156.8	3349.8	3827.6	5557.0	8065.3	14230.5	20344.1	20819.9	20380.5	18436.9
60°	2913.4	2949.7	3139.7	3494.2	4911.5	6866.2	13361.7	20801.8	21251.3	20860.3	18914.7
62°	2782.1	2791.1	2939.6	3287.1	4411.5	5999.5	12279.8	20828.0	21402.8	21155.3	19208.7
62.5°	2743.7	2749.7	2890.1	3234.6	4308.4	5827.8	11984.9	20806.8	21393.7	21206.8	19273.3
65°	2523.4	2537.6	2663.9	2986.1	3856.9	5158.0	10602.9	20460.3	21198.8	21120.0	19267.3
67.5°	2255.7	2259.8	2394.1	2684.1	3391.2	4528.7	8905.8	19797.6	20244.1	20142.1	18423.8
70°	1844.6	1918.3	2064.8	2320.4	2805.3	3756.9	6774.3	17733.8	18466.2	18567.2	16912.5
72.5°	1402.1	1397.1	1448.6	1626.4	2043.6	2886.1	4573.1	14858.8	16555.9	17102.5	15244.7
75°	865.7	899.1	1115.2	1257.7	1464.8	2035.5	2866.9	10343.3	14156.8	15101.3	13474.9
77.5°	672.8	678.8	791.0	1037.5	1200.1	1442.5	1788.0	5635.8	8874.5	11223.2	10494.8
80°	512.2	523.3	597.0	650.6	844.5	878.9	1193.0	2915.4	4041.8	5661.1	7050.1
82.5°	309.1	326.3	395.0	426.3	465.7	440.4	641.5	1572.9	2240.6	2897.2	3590.2
85°	155.6	186.9	262.6	248.5	211.1	195.0	274.8	760.7	1070.8	1417.3	1647.6
87.5°	39.4	47.5	61.6	73.7	62.6	51.5	74.8	206.1	212.1	203.0	568.7
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°	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6	4919.6
2.5°	4927.7	4886.3	4810.5	4767.1	4659.0	4617.6	4539.8	4568.1	4550.9	4533.7	4534.7
5°	4935.8	4861.0	4716.6	4612.5	4455.9	4376.1	4274.1	4257.9	4213.5	4186.2	4189.2
7.5°	4952.9	4845.9	4641.8	4476.1	4255.9	4130.7	3994.3	3971.0	3904.4	3874.1	3878.1
10°	4996.4	4870.1	4593.3	4349.9	4101.4	3927.6	3768.0	3716.5	3652.8	3618.5	3616.5
12.5°	5063.1	4906.5	4524.6	4253.9	3951.8	3726.6	3542.7	3459.9	3369.0	3338.7	3341.7
15°	5169.1	4952.9	4467.0	4121.6	3771.0	3536.7	3309.4	3209.4	3113.4	3078.0	3075.0
17.5°	5298.4	4995.4	4426.6	3966.0	3614.4	3333.6	3133.6	2997.2	2835.6	2812.4	2787.1
20°	5426.7	5080.2	4390.3	3852.9	3428.6	3129.6	2867.9	2728.5	2497.2	2410.3	2379.0
22.5°	5613.6	5214.6	4385.2	3718.5	3241.7	2906.3	2553.8	2328.5	2073.9	1926.4	1894.1
25°	5863.1	5362.1	4398.4	3616.5	3032.6	2622.4	2146.6	1821.4	1578.9	1412.2	1377.9
27.5°	6187.4	5563.1	4437.7	3504.3	2842.7	2282.0	1690.0	1355.7	1150.6	1011.2	978.9
30°	6665.2	5900.5	4499.4	3400.3	2565.9	1838.5	1242.5	976.9	817.2	731.4	730.4
32.5°	7780.5	6654.1	4534.7	3271.0	2308.3	1390.0	894.0	707.1	579.8	547.5	574.8
35°	9059.4	7721.9	4807.5	3131.6	1905.2	1022.3	638.4	503.1	450.5	458.6	473.8
37.5°	10239.2	8748.2	5223.7	2905.3	1525.4	720.3	458.6	400.0	388.9	418.2	445.5
40°	11283.8	9635.2	5580.3	2656.8	1078.9	503.1	367.7	369.7	358.6	371.7	380.8
42.5°	12308.1	10457.5	5957.1	2322.4	719.3	371.7	332.4	350.5	337.4	339.4	326.3
45°	13326.4	11325.2	6119.7	1909.3	481.9	322.2	311.1	332.4	331.3	323.3	304.1
47.5°	14205.2	11923.2	6325.8	1440.5	358.6	293.0	296.0	311.1	321.2	307.1	298.0
50°	14960.9	12557.6	6167.2	953.6	320.2	273.8	284.9	284.9	301.0	276.8	265.7
52.5°	15683.1	13189.0	5760.1	628.3	294.0	260.6	271.7	264.7	271.7	247.5	244.5
55°	16116.5	13515.3	5268.1	489.9	277.8	249.5	254.6	252.5	246.5	221.2	226.3
57.5°	16593.3	13891.1	4655.9	411.1	270.7	236.4	237.4	234.4	216.2	199.0	200.0
60°	16974.2	14171.9	4001.3	362.7	262.6	229.3	215.2	210.1	184.9	174.8	175.8
62°	17240.9	14185.0	3430.6	337.4	252.5	224.3	202.0	190.9	162.6	154.6	153.5
62.5°	17270.1	14135.5	3291.2	331.3	248.5	222.2	201.0	184.9	156.6	150.5	148.5
65°	17161.0	13585.0	2625.5	298.0	231.3	210.1	186.9	160.6	134.4	126.3	123.2
67.5°	16348.9	12599.0	2005.2	270.7	210.1	202.0	172.7	141.4	119.2	109.1	107.1
70°	14764.9	11264.6	1431.4	236.4	188.9	183.9	173.8	129.3	110.1	96.0	93.9
72.5°	13005.1	9844.3	973.8	210.1	167.7	151.5	128.3	122.2	103.0	84.9	82.8
75°	11067.6	7840.1	693.0	180.8	144.5	128.3	108.1	113.1	97.0	75.8	73.7
77.5°	8491.6	5766.1	514.2	148.5	112.1	104.0	90.9	100.0	87.9	68.7	67.7
80°	5798.5	3982.2	365.7	112.1	73.7	73.7	76.8	85.9	77.8	61.6	60.6
82.5°	3259.9	2096.1	216.2	80.8	50.5	50.5	59.6	69.7	64.7	53.5	52.5
85°	1350.6	758.7	114.2	50.5	33.3	34.3	42.4	51.5	50.5	42.4	41.4
87.5°	469.7	190.9	33.3	17.2	14.1	15.2	17.2	24.2	24.2	21.2	22.2
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)