

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: P237552

Luminaire Tested: **CTN-10-3-D-E1-T2-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237552
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-10-3-D-E1-T2-7030-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 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: 27943 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

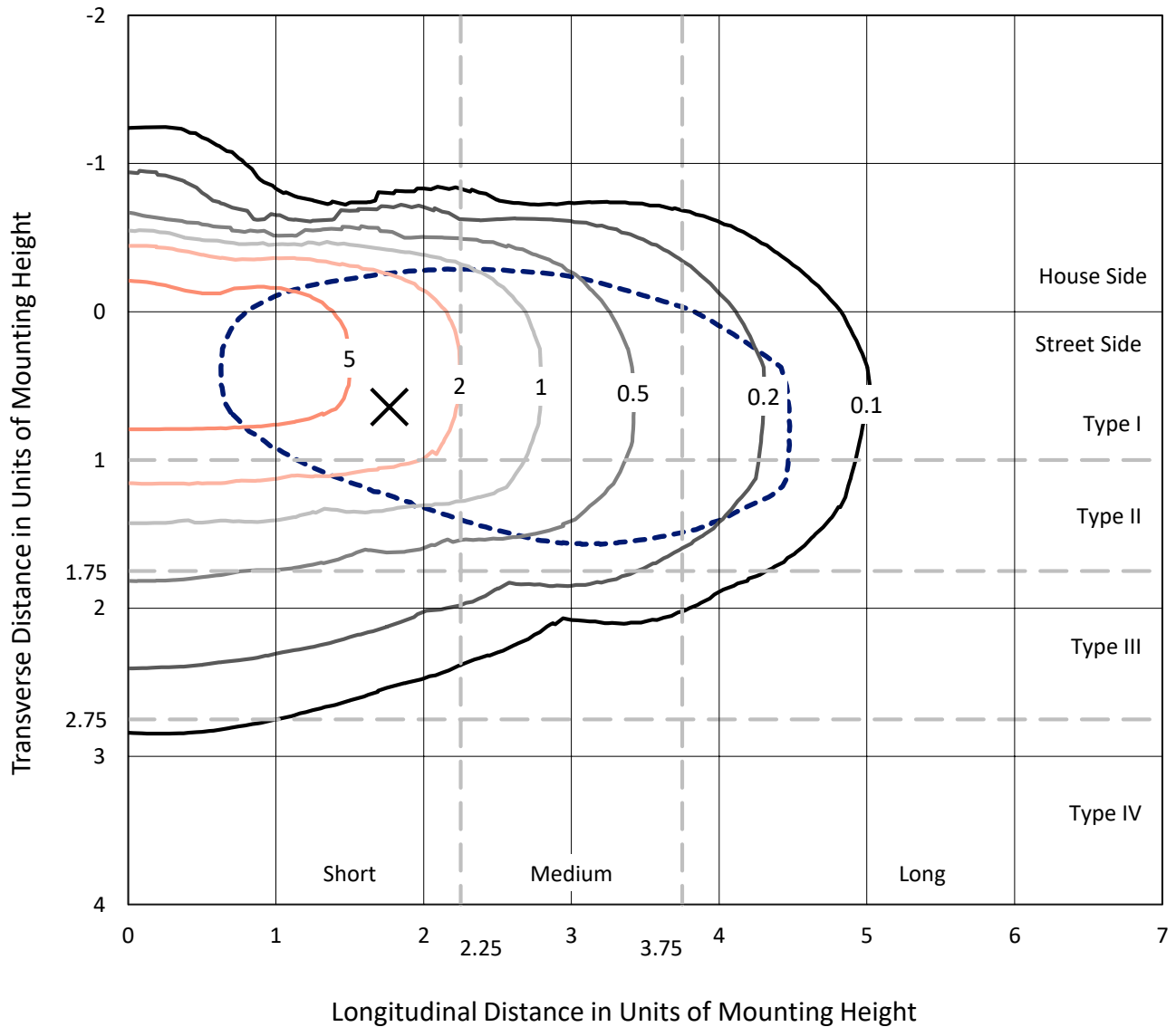
Input Watts (W): 212
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

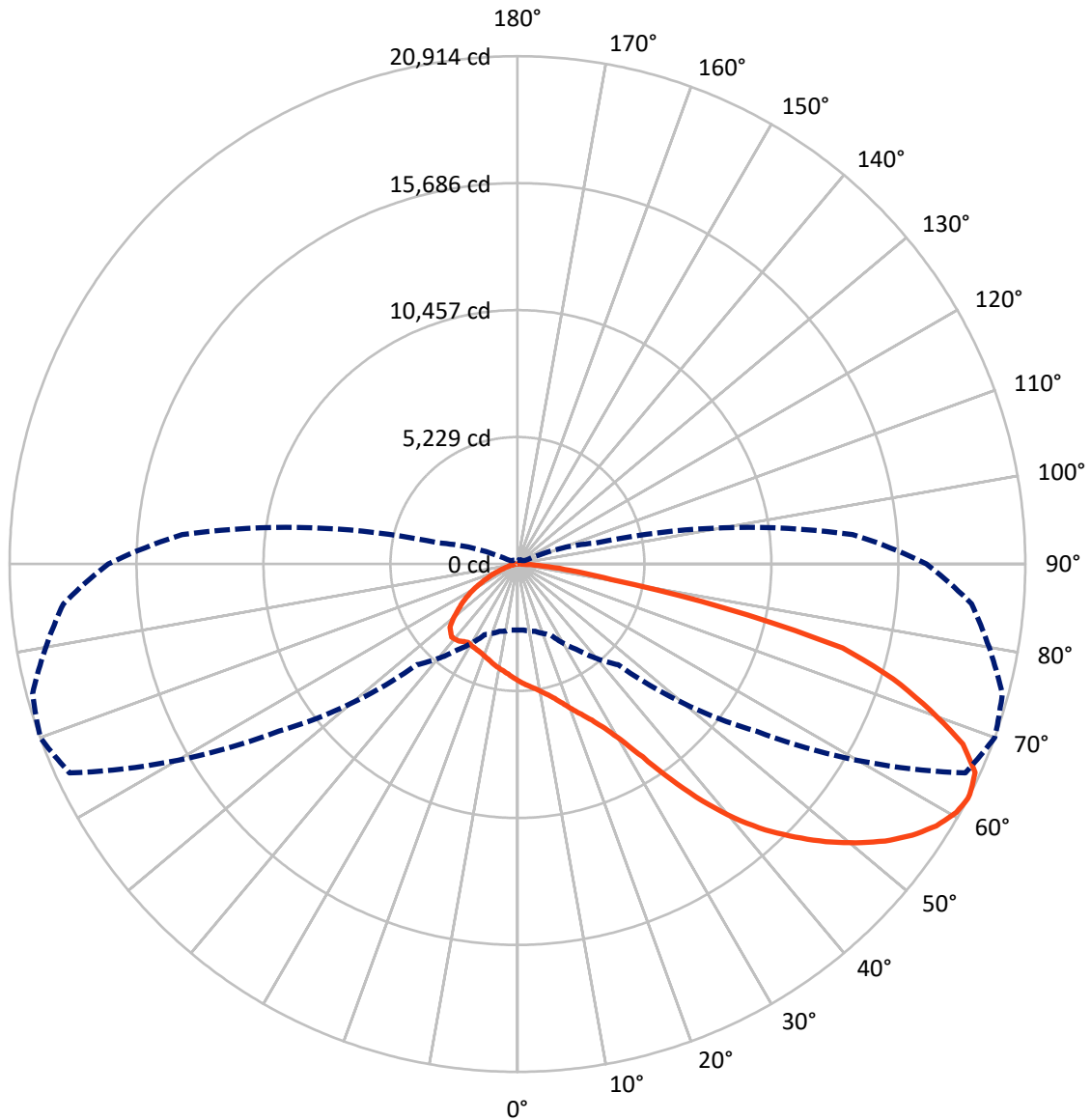
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 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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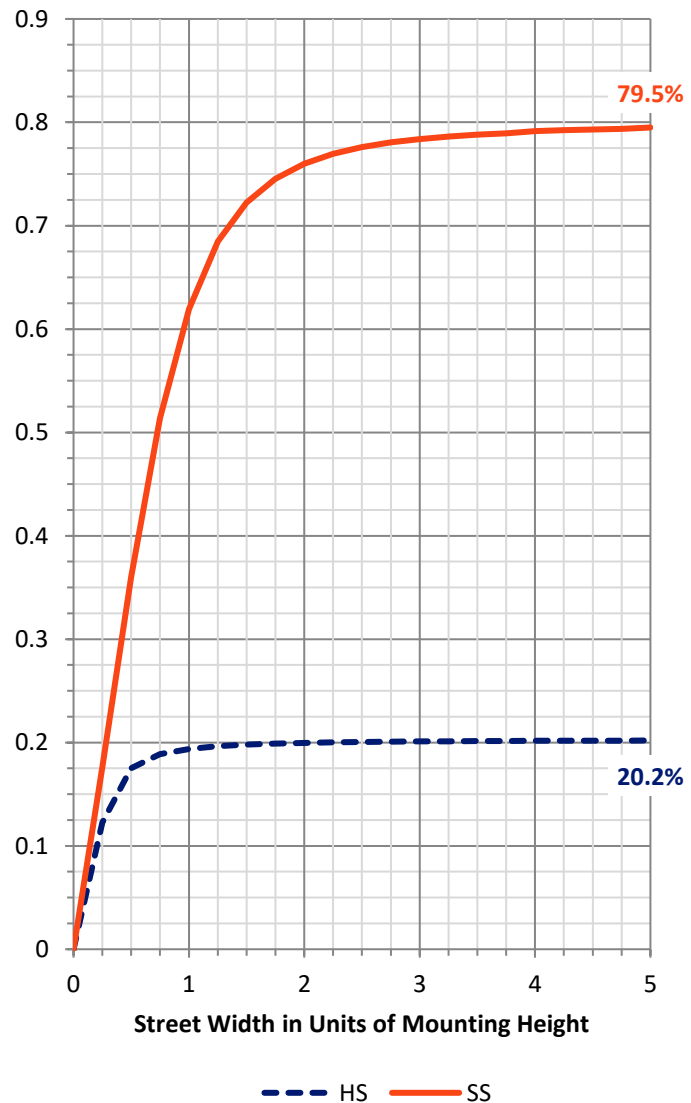
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5716.0	0.0	5716.0
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	22227.0	0.0	22227.0
	% Fixture	79.5	0.0	79.5
Total	Lumens	27943.0	0.0	27943.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	457.9	1.6
10°-20°	1393.2	5.0
20°-30°	2345.6	8.4
30°-40°	3541.7	12.7
40°-50°	4966.6	17.8
50°-60°	5804.8	20.8
60°-70°	5631.7	20.2
70°-80°	3292.3	11.8
80°-90°	509.3	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°	27943.0	100.0
0°-180°	27943.0	100.0



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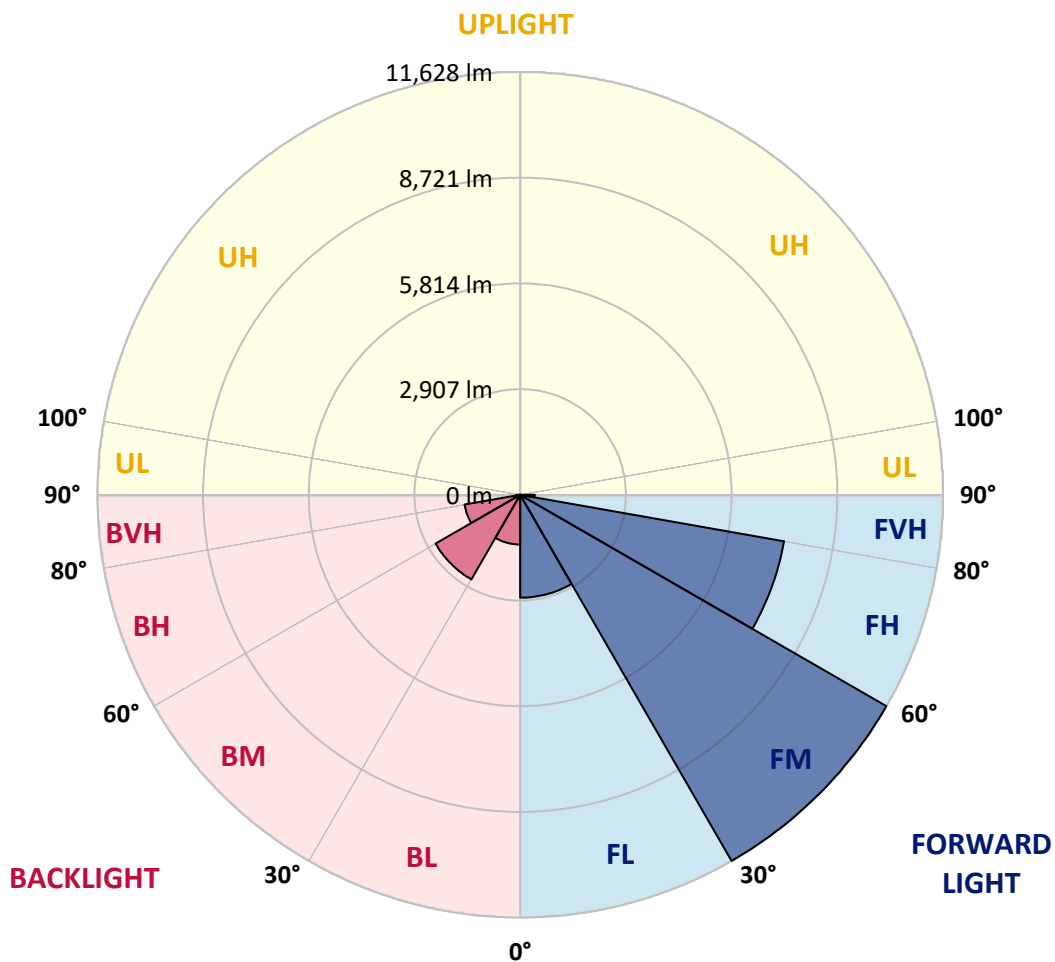
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2830.0	10.1			
FM	(30°-60°)	11628.1	41.6			
FH	(60°-80°)	7369.8	26.4			G3/7500
FVH	(80°-90°)	399.1	1.4			G3/500
BL	(0°-30°)	1366.6	4.9	B3/2500		
BM	(30°-60°)	2685.0	9.6	B3/5000		
BH	(60°-80°)	1554.2	5.6	B3/2500		G3/2500
BVH	(80°-90°)	110.2	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°	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3
2.5°	5216.9	5182.4	5167.6	5189.3	5044.2	5047.1	4977.1	4966.2	4932.6	4885.2	4832.9
5°	5515.0	5474.6	5453.8	5466.7	5313.7	5287.0	5172.5	5116.2	5050.1	4990.9	4877.4
7.5°	5801.3	5759.8	5744.0	5737.1	5552.5	5512.1	5366.0	5266.3	5176.4	5100.4	4946.5
10°	6089.5	6047.1	6014.5	6023.4	5829.9	5757.9	5589.1	5451.9	5336.4	5237.7	5025.4
12.5°	6375.8	6324.5	6288.9	6288.9	6098.4	6028.3	5838.8	5663.1	5516.0	5391.6	5125.1
15°	6669.0	6601.8	6594.0	6594.0	6391.6	6306.7	6120.1	5925.7	5745.0	5585.1	5245.5
17.5°	6972.0	6887.1	6885.2	6898.0	6712.4	6616.7	6440.9	6259.3	6029.3	5827.0	5392.6
20°	7171.4	7095.4	7077.6	7116.1	6970.0	6907.9	6719.3	6592.0	6370.9	6130.0	5582.2
22.5°	7323.4	7277.0	7293.8	7357.0	7285.9	7232.6	7034.2	6919.7	6720.3	6473.5	5837.8
25°	7476.4	7445.8	7484.3	7595.9	7601.8	7616.6	7450.8	7304.7	7119.1	6899.0	6170.5
27.5°	7429.1	7420.2	7536.6	7766.6	7893.0	7960.1	7867.3	7816.0	7646.2	7414.2	6589.0
30°	7463.6	7441.9	7582.1	7873.3	8154.6	8349.0	8349.0	8465.5	8391.5	8158.5	7227.7
32.5°	7360.9	7320.5	7481.4	7898.9	8382.6	8760.7	8928.5	9341.1	9470.4	9386.5	8494.2
35°	6888.1	6918.7	7233.6	7796.3	8539.6	9163.4	9607.6	10492.1	10889.9	10984.7	9952.1
37.5°	6593.0	6605.8	6926.6	7628.5	8594.8	9559.3	10350.9	11820.7	12384.4	12442.6	11231.4
40°	6186.3	6234.6	6594.0	7403.4	8563.3	9893.9	11151.5	13130.6	13757.5	13709.1	12350.8
42.5°	5865.5	5879.3	6193.2	7046.1	8425.1	10160.4	11958.9	14320.1	14976.6	14841.3	13457.4
45°	5465.7	5491.3	5788.5	6601.8	8179.3	10295.6	12655.8	15435.6	16036.7	15867.9	14415.9
47.5°	4982.0	5094.5	5405.5	6123.1	7762.7	10281.8	13246.1	16401.0	17087.0	16827.4	15312.2
50°	4012.6	4149.8	4771.7	5691.7	7216.8	10088.4	13716.0	17464.1	18051.4	17789.8	16130.5
52.5°	3505.3	3531.9	3848.8	5207.0	6577.2	9656.0	14035.8	18342.6	18954.6	18679.2	16917.2
55°	3276.2	3303.9	3463.8	4422.3	5989.8	8890.0	14153.3	19180.7	19723.6	19407.7	17565.8
57.5°	3075.9	3084.7	3273.3	3740.2	5430.1	7881.2	13905.5	19879.6	20344.5	19915.1	18015.9
60°	2846.8	2882.4	3068.0	3414.4	4799.4	6709.4	13056.6	20326.7	20766.0	20384.0	18482.8
62°	2718.5	2727.4	2872.5	3212.1	4310.7	5862.5	11999.4	20352.4	20914.1	20672.2	18770.1
62.5°	2681.0	2686.9	2824.1	3160.8	4210.1	5694.7	11711.2	20331.7	20905.2	20722.6	18833.2
65°	2465.8	2479.6	2603.0	2917.9	3768.8	5040.2	10360.8	19993.1	20714.7	20637.7	18827.3
67.5°	2204.2	2208.2	2339.5	2622.8	3313.8	4425.3	8702.4	19345.5	19781.9	19682.2	18003.1
70°	1802.5	1874.5	2017.7	2267.4	2741.2	3671.1	6619.6	17328.9	18044.5	18143.2	16526.3
72.5°	1370.1	1365.2	1415.5	1589.3	1996.9	2820.2	4468.7	14519.5	16177.9	16711.9	14896.6
75°	846.0	878.5	1089.8	1229.0	1431.3	1989.0	2801.4	10107.1	13833.5	14756.4	13167.2
77.5°	657.4	663.3	772.9	1013.8	1172.7	1409.6	1747.2	5507.1	8671.8	10966.9	10255.2
80°	500.5	511.3	583.4	635.7	825.2	858.8	1165.8	2848.8	3949.5	5531.8	6889.1
82.5°	302.1	318.8	386.0	416.6	455.1	430.4	626.8	1536.9	2189.4	2831.1	3508.2
85°	152.0	182.6	256.7	242.8	206.3	190.5	268.5	743.3	1046.3	1384.9	1610.0
87.5°	38.5	46.4	60.2	72.1	61.2	50.3	73.0	201.4	207.3	198.4	555.7
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°	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3	4807.3
2.5°	4815.2	4774.7	4700.7	4658.2	4552.6	4512.1	4436.1	4463.7	4447.0	4430.2	4431.2
5°	4823.1	4750.0	4608.9	4507.2	4354.2	4276.2	4176.5	4160.7	4117.3	4090.6	4093.6
7.5°	4839.8	4735.2	4535.8	4373.9	4158.7	4036.3	3903.1	3880.4	3815.2	3785.6	3789.5
10°	4882.3	4758.9	4488.4	4250.5	4007.7	3837.9	3682.0	3631.6	3569.4	3535.9	3533.9
12.5°	4947.4	4794.4	4421.3	4156.8	3861.6	3641.5	3461.8	3380.9	3292.0	3262.4	3265.4
15°	5051.1	4839.8	4365.0	4027.4	3684.9	3455.9	3233.8	3136.1	3042.3	3007.7	3004.8
17.5°	5177.4	4881.3	4325.6	3875.4	3531.9	3257.5	3062.0	2928.8	2770.8	2748.1	2723.5
20°	5302.8	4964.2	4290.0	3764.9	3350.3	3058.1	2802.4	2666.2	2440.2	2355.3	2324.7
22.5°	5485.4	5095.5	4285.1	3633.6	3167.7	2839.9	2495.4	2275.3	2026.6	1882.4	1850.8
25°	5729.2	5239.6	4297.9	3533.9	2963.3	2562.6	2097.6	1779.8	1542.9	1380.0	1346.4
27.5°	6046.1	5436.1	4336.4	3424.3	2777.8	2229.9	1651.4	1324.7	1124.3	988.1	956.5
30°	6513.0	5765.8	4396.6	3322.6	2507.3	1796.6	1214.2	954.5	798.6	714.7	713.7
32.5°	7602.8	6502.1	4431.2	3196.3	2255.6	1358.3	873.6	691.0	566.6	535.0	561.7
35°	8852.5	7545.5	4697.7	3060.1	1861.7	999.0	623.9	491.6	440.3	448.2	463.0
37.5°	10005.4	8548.4	5104.4	2839.0	1490.5	703.8	448.2	390.9	380.0	408.7	435.3
40°	11026.1	9415.1	5452.8	2596.1	1054.2	491.6	359.3	361.3	350.4	363.3	372.1
42.5°	12027.1	10218.7	5821.0	2269.4	702.8	363.3	324.8	342.5	329.7	331.7	318.8
45°	13022.1	11066.6	5980.0	1865.7	470.9	314.9	304.0	324.8	323.8	315.9	297.1
47.5°	13880.9	11651.0	6181.3	1407.6	350.4	286.3	289.2	304.0	313.9	300.1	291.2
50°	14619.2	12270.9	6026.4	931.8	312.9	267.5	278.4	278.4	294.2	270.5	259.6
52.5°	15325.0	12887.8	5628.5	614.0	287.3	254.7	265.5	258.6	265.5	241.8	238.9
55°	15748.5	13206.7	5147.8	478.8	271.5	243.8	248.8	246.8	240.9	216.2	221.1
57.5°	16214.4	13573.9	4549.6	401.8	264.5	231.0	232.0	229.0	211.2	194.5	195.4
60°	16586.6	13848.3	3910.0	354.4	256.7	224.1	210.3	205.3	180.6	170.8	171.8
62°	16847.2	13861.1	3352.3	329.7	246.8	219.1	197.4	186.6	158.9	151.0	150.0
62.5°	16875.8	13812.7	3216.0	323.8	242.8	217.2	196.4	180.6	153.0	147.1	145.1
65°	16769.2	13274.8	2565.5	291.2	226.1	205.3	182.6	157.0	131.3	123.4	120.4
67.5°	15975.5	12311.3	1959.4	264.5	205.3	197.4	168.8	138.2	116.5	106.6	104.6
70°	14427.7	11007.4	1398.7	231.0	184.6	179.7	169.8	126.4	107.6	93.8	91.8
72.5°	12708.2	9619.5	951.6	205.3	163.9	148.1	125.4	119.4	100.7	82.9	80.9
75°	10814.9	7661.0	677.2	176.7	141.2	125.4	105.6	110.6	94.8	74.0	72.1
77.5°	8297.7	5634.5	502.4	145.1	109.6	101.7	88.8	97.7	85.9	67.1	66.1
80°	5666.1	3891.2	357.3	109.6	72.1	72.1	75.0	83.9	76.0	60.2	59.2
82.5°	3185.4	2048.3	211.2	79.0	49.4	49.4	58.2	68.1	63.2	52.3	51.3
85°	1319.8	741.3	111.5	49.4	32.6	33.6	41.5	50.3	49.4	41.5	40.5
87.5°	459.0	186.6	32.6	16.8	13.8	14.8	16.8	23.7	23.7	20.7	21.7
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)