

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: P237527

Luminaire Tested: **CTN-8-3-D-E1-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237527
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-8-3-D-E1-T3-7030-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 3000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28175 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

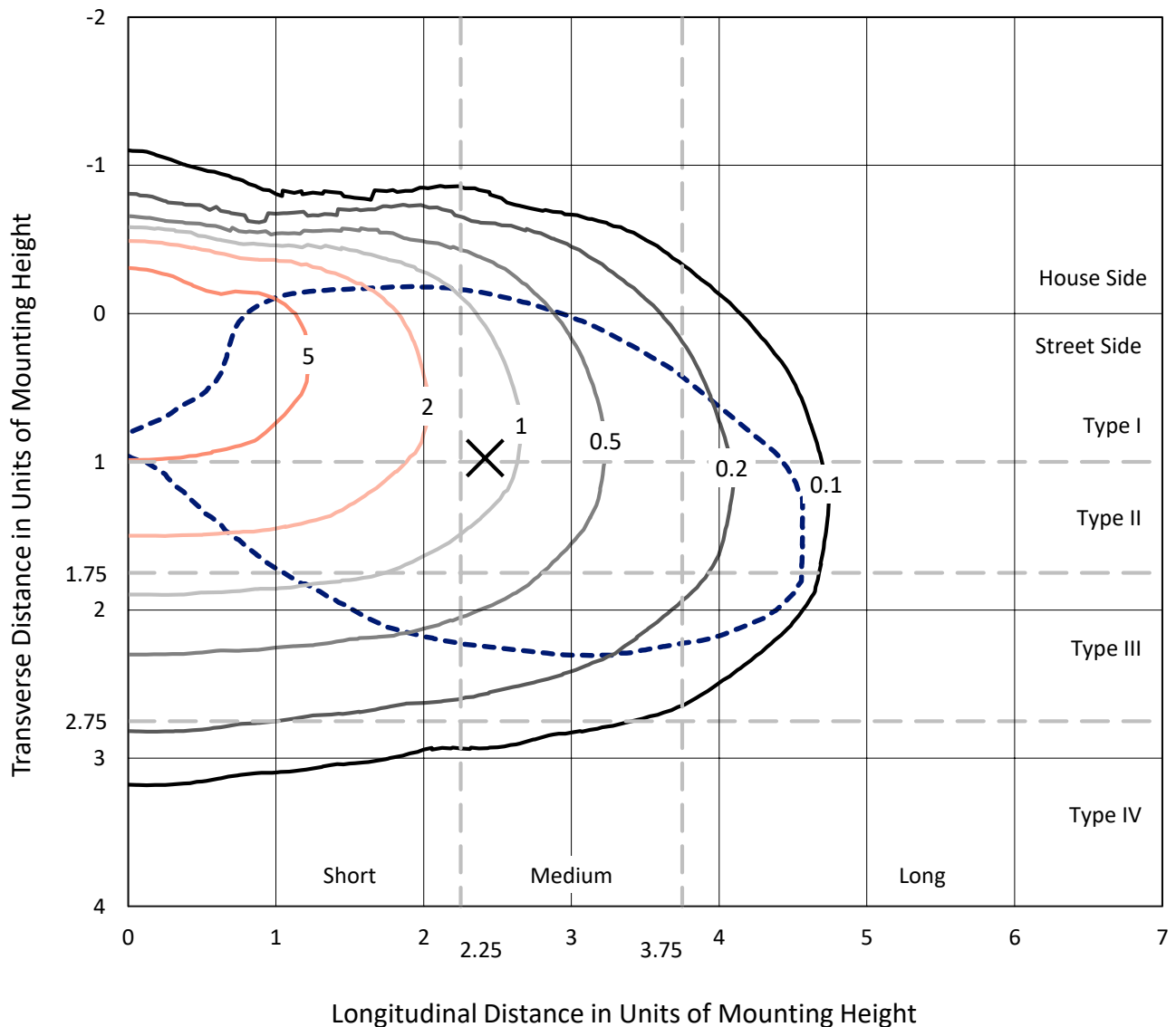
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

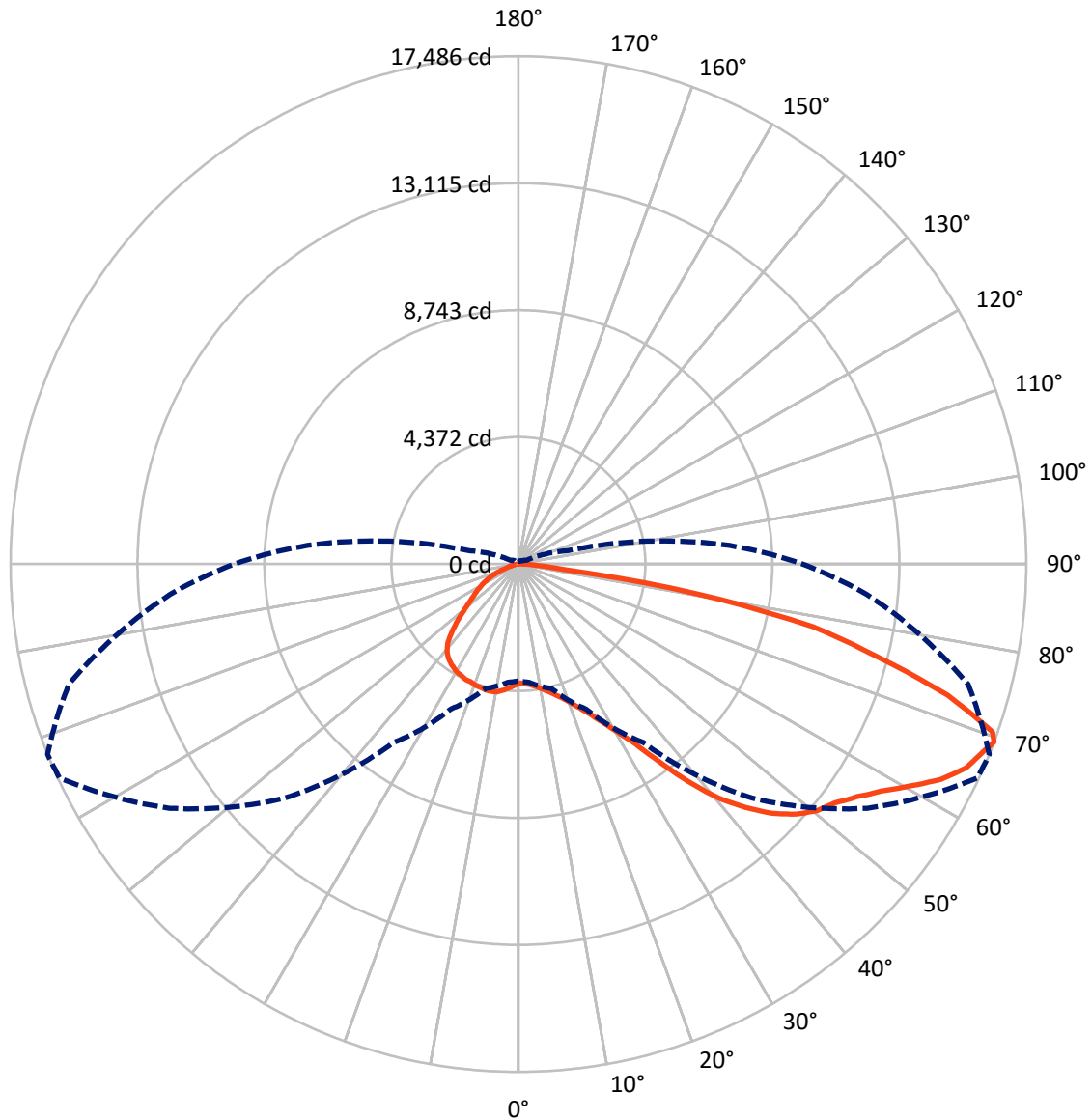
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 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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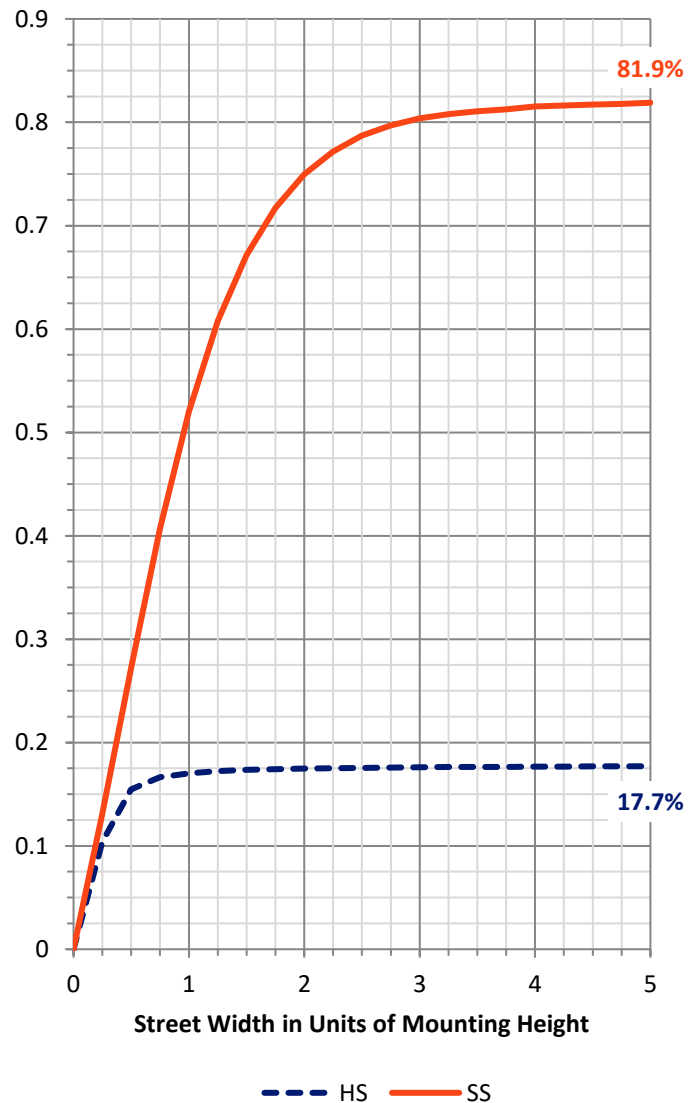
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5056.4	0.0	5056.4
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	23118.6	0.0	23118.6
	% Fixture	82.1	0.0	82.1
Total	Lumens	28175.0	0.0	28175.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.6	1.5
10°-20°	1291.5	4.6
20°-30°	2207.7	7.8
30°-40°	3401.8	12.1
40°-50°	4881.8	17.3
50°-60°	5875.4	20.9
60°-70°	6165.7	21.9
70°-80°	3572.0	12.7
80°-90°	367.5	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°	28175.0	100.0
0°-180°	28175.0	100.0

Coefficient of Utilization



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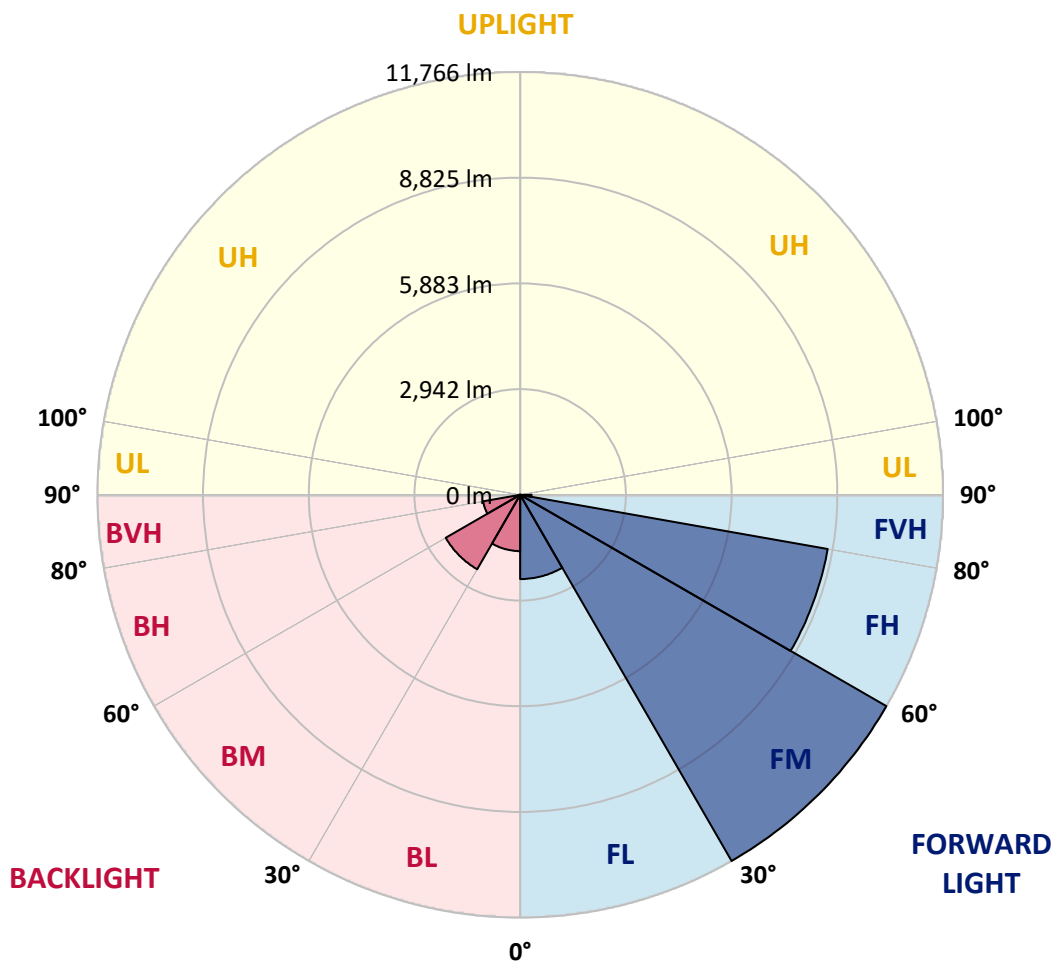
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2344.0	8.3			
FM (30°-60°)	11766.3	41.8			
FH (60°-80°)	8688.9	30.8			G4/12000
FVH (80°-90°)	319.4	1.1			G3/500
BL (0°-30°)	1566.8	5.6	B3/2500		
BM (30°-60°)	2392.7	8.5	B2/2500		
BH (60°-80°)	1048.8	3.7	B3/2500		G3/2500
BVH (80°-90°)	48.1	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°	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2
2.5°	4144.1	4110.9	4114.8	4141.2	4063.1	4096.2	4075.7	4118.7	4125.5	4105.0	4123.6
5°	4226.1	4197.8	4196.8	4223.2	4136.3	4161.7	4129.4	4158.7	4167.5	4146.0	4178.3
7.5°	4385.2	4354.9	4349.1	4375.4	4265.1	4272.9	4229.0	4243.7	4251.5	4222.2	4254.4
10°	4613.6	4580.5	4559.0	4573.6	4449.6	4430.1	4354.9	4353.0	4364.7	4324.7	4376.4
12.5°	4869.4	4830.4	4799.1	4802.1	4660.5	4627.3	4527.7	4492.6	4500.4	4446.7	4509.2
15°	5147.6	5091.0	5061.7	5062.7	4903.6	4847.9	4720.1	4662.5	4657.6	4605.8	4642.0
17.5°	5482.5	5436.6	5399.5	5380.0	5211.1	5100.8	4948.5	4873.3	4846.0	4811.8	4793.3
20°	5875.9	5818.3	5779.3	5772.4	5565.5	5419.0	5217.0	5117.4	5085.2	5056.9	4973.9
22.5°	6314.2	6255.7	6202.0	6193.2	5973.5	5796.8	5525.4	5402.4	5374.1	5341.9	5176.0
25°	6718.4	6711.6	6652.0	6642.2	6430.4	6201.0	5882.7	5725.6	5725.6	5687.5	5432.7
27.5°	7169.4	7179.2	7125.5	7113.8	6914.6	6660.8	6282.0	6131.7	6162.9	6094.6	5755.8
30°	7644.8	7624.3	7609.7	7622.4	7437.9	7169.4	6775.0	6648.1	6696.9	6618.8	6189.3
32.5°	8070.5	8054.8	8064.6	8113.4	7980.7	7732.7	7393.9	7314.9	7361.7	7410.5	6966.4
35°	8407.3	8374.1	8497.1	8604.5	8566.4	8331.1	8058.8	8225.7	8354.5	8577.1	8111.5
37.5°	8704.0	8679.6	8829.0	9048.6	9096.5	8965.7	8881.7	9347.4	9494.8	9794.5	9116.0
40°	8852.4	8847.5	9031.1	9317.1	9511.4	9596.3	9743.7	10378.3	10593.0	10675.0	9880.4
42.5°	8804.6	8820.2	9144.3	9585.6	9899.9	10264.0	10560.8	11258.8	11456.0	11388.7	10550.1
45°	8670.8	8678.7	9007.6	9695.9	10236.7	10950.3	11346.7	12074.9	12249.7	12012.5	11083.1
47.5°	8485.4	8488.3	8835.8	9619.7	10512.0	11571.2	12024.2	12727.1	12868.6	12533.8	11466.8
50°	8234.5	8239.4	8654.2	9524.1	10749.2	12079.8	12554.3	13232.8	13342.1	12903.8	11798.7
52.5°	7917.2	7960.2	8414.1	9370.8	10897.6	12441.0	12955.5	13603.7	13657.4	13346.0	12092.5
55°	7551.1	7596.0	8108.5	9162.9	10955.2	12646.0	13236.7	14060.6	14146.5	13840.0	12331.7
57.5°	7117.7	7179.2	7719.0	8825.1	10820.5	12731.9	13522.7	14624.9	14741.0	14356.4	12577.7
60°	6614.9	6691.1	7259.2	8403.4	10509.1	12822.7	14057.7	15381.4	15516.1	14911.9	12792.5
62.5°	6089.7	6138.5	6652.0	7828.4	10010.2	12893.0	14633.6	16313.7	16325.4	15399.0	12911.6
65°	5386.8	5438.6	5898.4	7102.0	9261.5	12669.5	14924.6	16967.8	16932.7	15780.7	12871.5
67.5°	4582.4	4631.2	5007.1	6199.0	8233.5	12042.7	14825.0	17228.4	17251.9	16058.0	12487.9
69°	4024.0	4088.4	4442.8	5512.8	7507.2	11401.4	14658.0	17431.5	17486.2	16032.6	12043.7
70°	3546.6	3629.6	3966.4	4906.5	6892.2	10818.5	14335.9	17316.3	17320.2	15775.8	11634.7
72.5°	2316.6	2367.3	2425.9	3183.5	4958.3	8573.2	12686.1	15357.0	15458.5	14077.2	10172.3
75°	1146.1	1191.0	1409.7	1684.0	2549.9	5743.1	10058.1	12581.6	12773.9	11954.9	8334.0
77.5°	632.6	641.4	718.5	1103.1	1321.8	2596.8	6874.6	10029.8	10366.6	9742.7	5985.2
80°	394.4	392.4	410.0	513.5	741.0	1231.0	2903.3	5628.9	6234.2	5087.1	2365.4
82.5°	307.5	301.7	302.6	331.9	313.4	579.9	1208.6	1639.1	1653.7	1468.2	920.6
85°	157.2	177.7	210.9	220.6	185.5	315.3	556.4	647.2	662.9	580.9	479.3
87.5°	52.7	53.7	56.6	55.6	49.8	108.4	206.0	240.2	213.8	121.1	164.0
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°	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2	4098.2
2.5°	4151.9	4143.1	4160.7	4200.7	4167.5	4197.8	4167.5	4269.0	4257.3	4250.5	4270.0
5°	4209.5	4208.5	4236.8	4301.3	4298.3	4352.0	4322.7	4423.3	4408.6	4406.7	4424.3
7.5°	4287.6	4306.1	4336.4	4402.8	4403.8	4447.7	4414.5	4493.6	4461.4	4453.5	4478.0
10°	4406.7	4411.6	4435.0	4480.9	4416.4	4436.0	4381.3	4443.8	4398.9	4394.0	4430.1
12.5°	4520.9	4527.7	4492.6	4478.0	4395.0	4369.6	4273.9	4307.1	4255.4	4250.5	4268.1
15°	4642.9	4597.1	4513.1	4465.3	4321.8	4230.0	4122.6	4057.2	3968.4	3927.4	3943.0
17.5°	4769.8	4681.0	4523.8	4407.7	4215.3	4081.6	3867.8	3756.5	3624.7	3557.4	3544.7
20°	4908.5	4783.5	4550.2	4378.4	4108.0	3844.4	3583.7	3328.9	3178.6	3109.3	3090.7
22.5°	5064.7	4912.4	4587.3	4280.8	3940.1	3619.8	3179.6	2858.4	2639.7	2572.4	2553.8
25°	5259.9	5056.9	4638.1	4256.3	3779.0	3252.8	2705.1	2341.0	2086.2	1983.7	1962.2
27.5°	5497.1	5256.0	4721.0	4140.2	3495.9	2843.7	2233.6	1814.8	1550.2	1429.2	1402.8
30°	5842.7	5510.8	4776.7	4071.8	3244.0	2419.1	1735.7	1268.1	1017.2	928.4	905.0
32.5°	6524.1	5948.1	4889.9	3914.7	2872.1	1925.1	1194.9	778.1	602.3	551.6	532.0
35°	7536.5	6772.1	5052.9	3728.2	2454.2	1369.6	709.7	451.0	362.2	343.6	337.8
37.5°	8459.0	7585.3	5368.3	3441.2	1905.6	842.5	411.0	289.0	266.5	269.4	269.4
40°	9155.1	8189.6	5736.3	3062.4	1292.5	472.5	282.1	240.2	245.0	246.0	245.0
42.5°	9807.2	8743.1	5914.0	2644.6	748.8	313.4	245.0	223.6	227.5	224.5	222.6
45°	10319.7	9139.4	5966.7	2082.3	410.0	280.2	230.4	207.9	206.0	207.9	209.9
47.5°	10652.6	9381.5	5846.6	1594.2	309.5	260.7	221.6	197.2	192.3	206.0	205.0
50°	10899.6	9547.5	5381.0	1212.5	301.7	244.1	210.9	184.5	186.5	203.1	201.1
52.5°	11079.2	9590.5	4870.4	972.3	288.0	232.3	201.1	178.6	176.7	189.4	190.4
55°	11221.7	9475.3	4552.1	765.4	276.3	220.6	193.3	172.8	163.0	166.9	166.0
57.5°	11310.6	9343.5	4189.0	638.5	265.5	207.9	182.6	157.2	142.5	143.5	142.5
60°	11291.0	9255.6	3772.1	523.3	251.9	196.2	167.9	140.6	125.9	122.0	122.0
62.5°	11252.0	9075.0	3341.6	455.9	240.2	192.3	150.3	127.9	117.1	113.2	113.2
65°	10986.5	8644.5	2765.7	390.5	228.4	181.6	140.6	123.0	110.3	106.4	106.4
67.5°	10327.5	7932.8	2141.8	339.7	219.7	164.0	137.6	120.1	106.4	101.5	101.5
69°	9771.1	7300.2	1759.2	312.4	210.9	156.2	137.6	121.1	104.5	98.6	98.6
70°	9336.6	6803.3	1455.6	295.8	202.1	151.3	137.6	122.0	103.5	96.6	95.7
72.5°	8011.9	5311.6	808.3	250.9	167.9	137.6	134.7	123.0	98.6	88.8	87.9
75°	6147.3	3734.1	481.3	211.8	141.6	125.9	127.9	118.1	90.8	80.1	80.1
77.5°	3841.5	1715.2	358.3	166.0	115.2	109.3	111.3	104.5	82.0	73.2	73.2
80°	1312.0	774.1	270.4	127.9	83.0	84.9	91.8	87.9	73.2	66.4	65.4
82.5°	718.5	503.7	191.3	88.8	57.6	70.3	70.3	71.3	63.5	58.6	57.6
85°	390.5	262.6	118.1	53.7	41.0	51.7	49.8	53.7	51.7	47.8	46.9
87.5°	135.7	89.8	39.0	19.5	16.6	17.6	20.5	27.3	26.4	27.3	28.3
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)