

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: P591365

Luminaire Tested: **CTN-CA8-330-730-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591365  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-330-730-U-T3-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28740 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G3

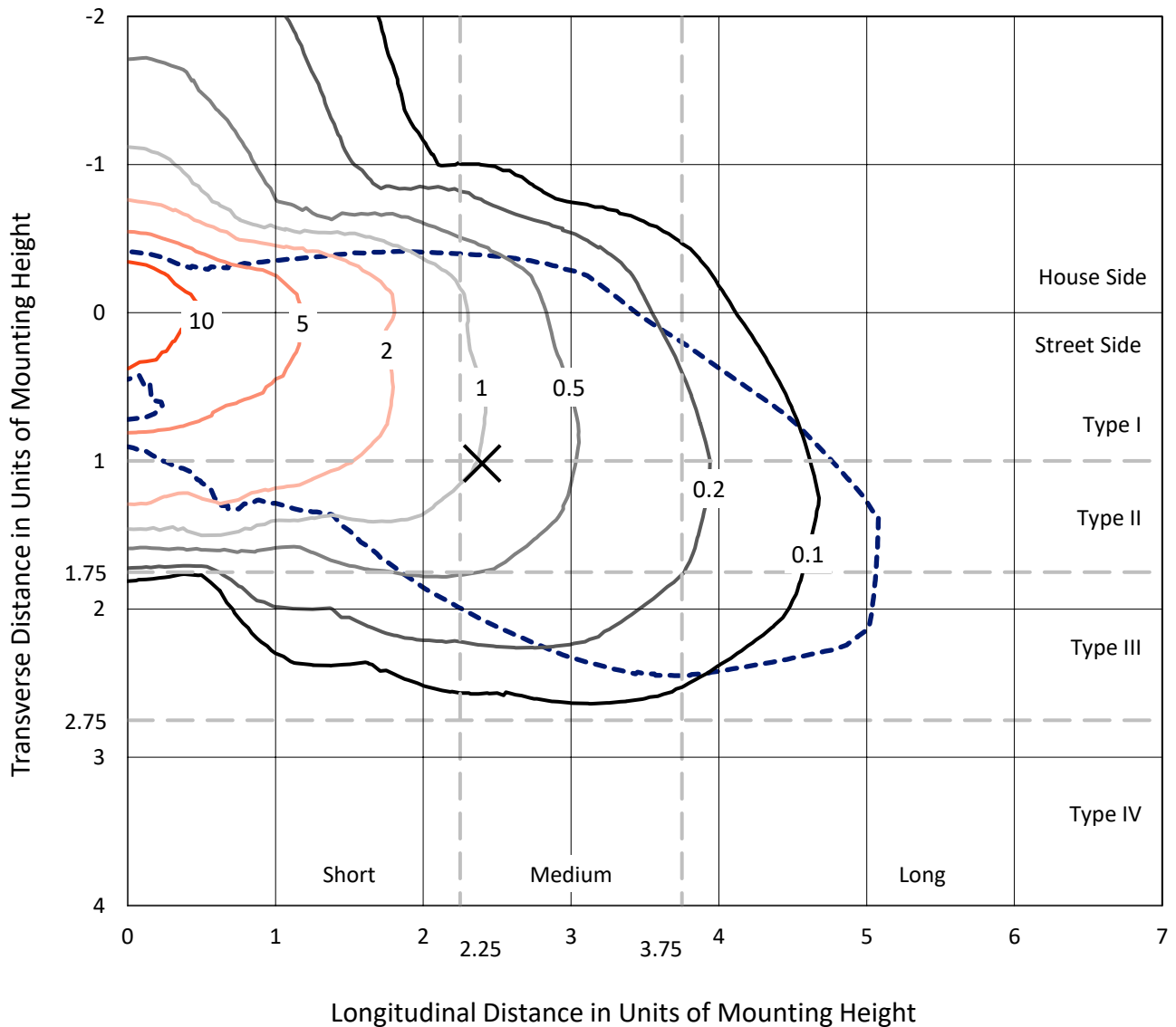
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

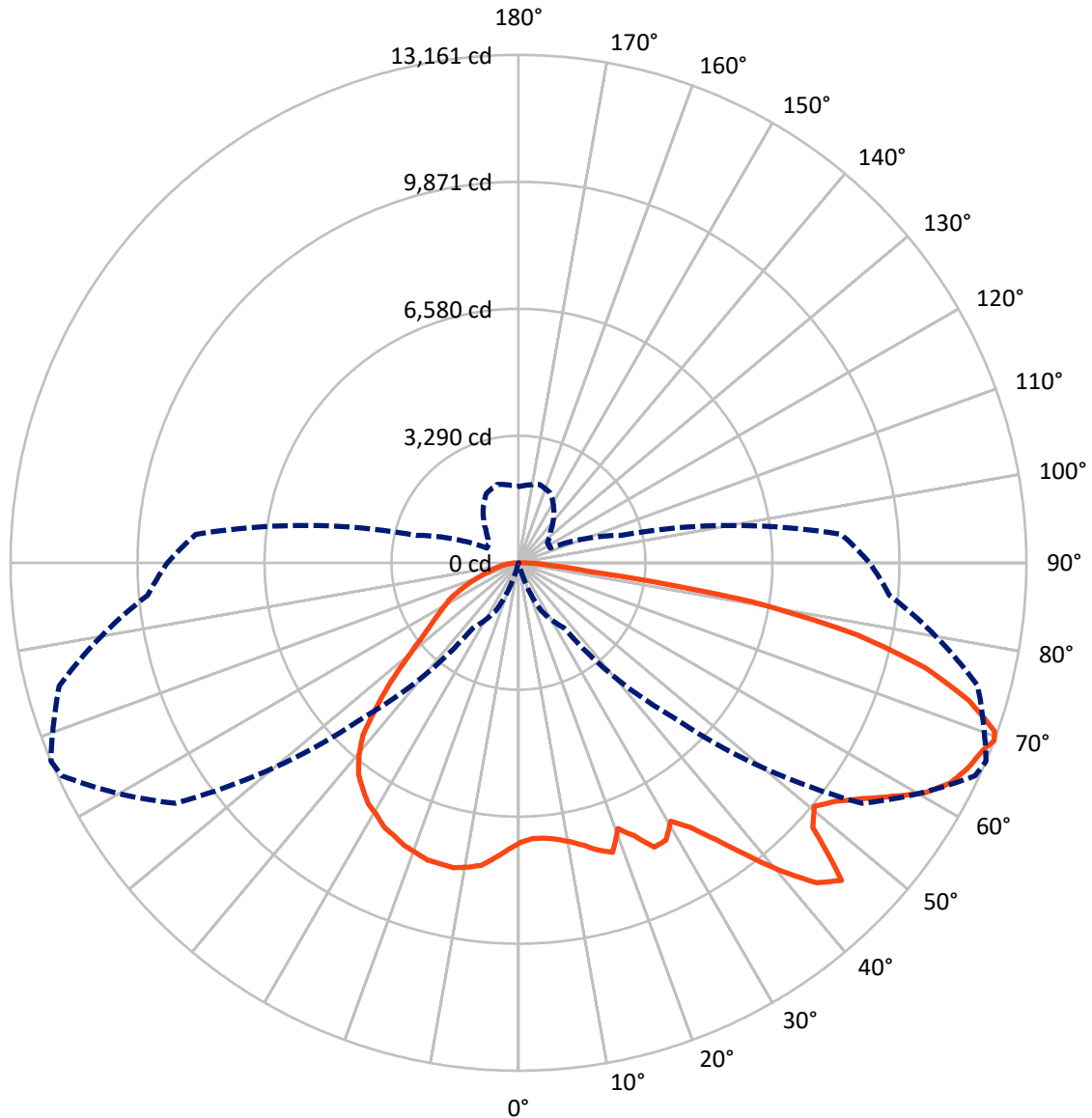
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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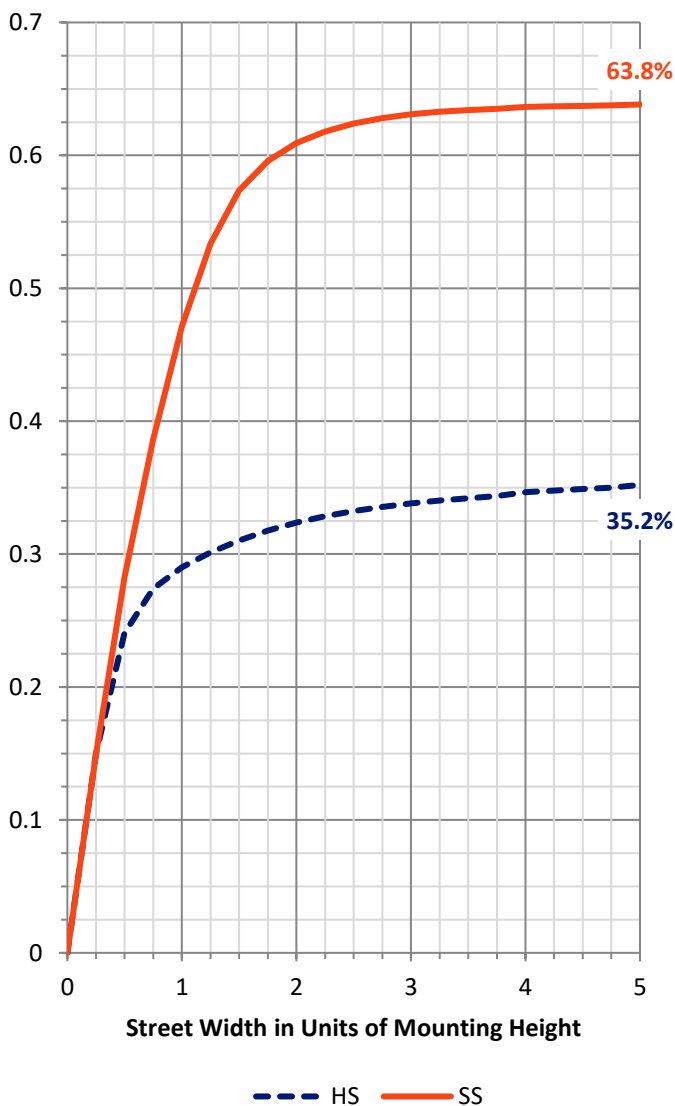
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10397.3	0.0	10397.3
	% Fixture	36.2	0.0	36.2
<b>Street Side</b>	Lumens	18342.7	0.0	18342.7
	% Fixture	63.8	0.0	63.8
<b>Total</b>	Lumens	28740.0	0.0	28740.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	724.0	2.5
10°-20°	2235.3	7.8
20°-30°	3299.1	11.5
30°-40°	4145.1	14.4
40°-50°	4862.0	16.9
50°-60°	5087.7	17.7
60°-70°	4545.3	15.8
70°-80°	3199.0	11.1
80°-90°	642.6	2.2
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°	28740.0	100.0
0°-180°	28740.0	100.0

**Coefficient of Utilization**

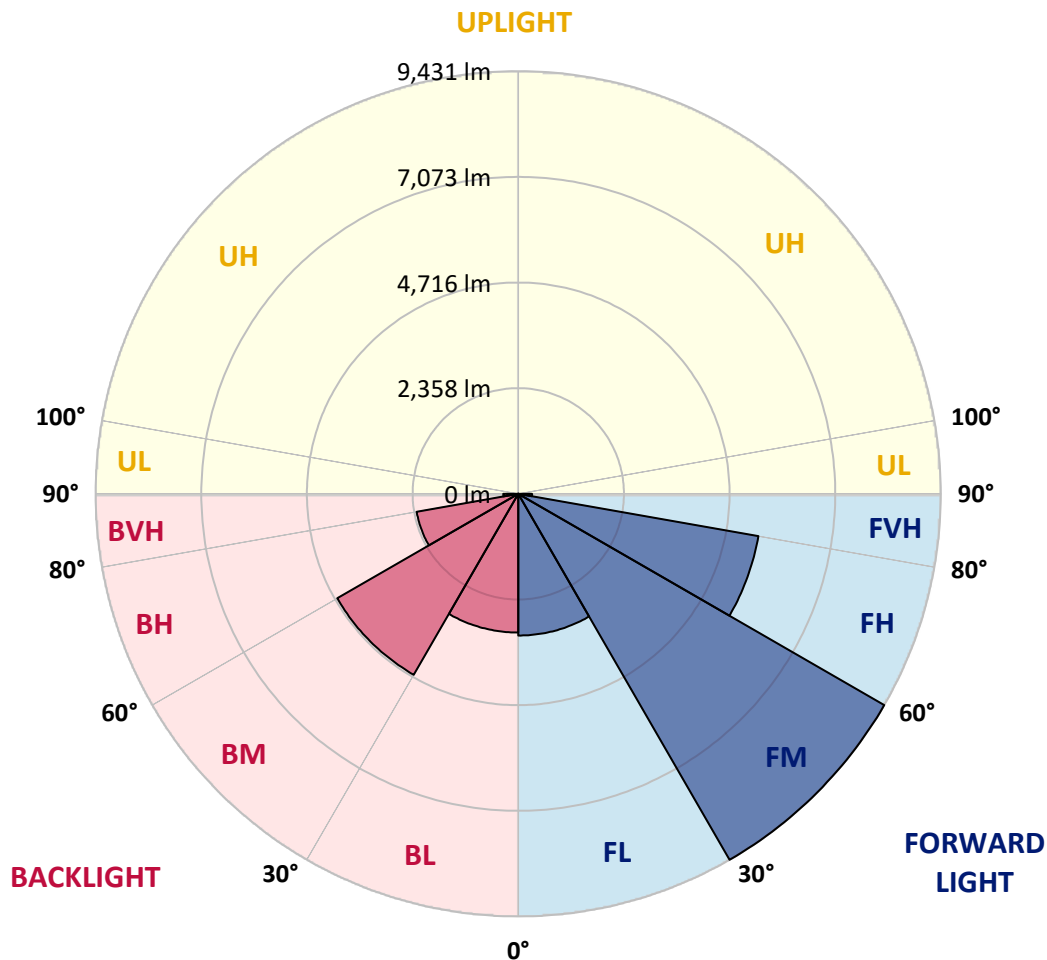


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3162.7	11.0			
FM (30°-60°)	9431.2	32.8			
FH (60°-80°)	5441.7	18.9			G3/7500
FVH (80°-90°)	307.1	1.1			G3/500
BL (0°-30°)	3095.6	10.8	B4/5000		
BM (30°-60°)	4663.6	16.2	B3/5000		
BH (60°-80°)	2302.6	8.0	B3/2500		G3/2500
BVH (80°-90°)	335.5	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8
2.5°	7067.5	7025.9	7045.3	7100.2	6985.8	7067.5	7037.8	7121.0	7152.2	7147.8	7266.6
5°	7124.0	7077.9	7085.4	7127.0	7002.2	7066.1	7037.8	7129.9	7165.6	7155.2	7317.1
7.5°	7324.5	7274.0	7257.7	7271.0	7135.9	7184.9	7124.0	7198.3	7236.9	7236.9	7421.1
10°	7640.9	7580.0	7544.4	7542.9	7383.9	7361.6	7287.4	7321.5	7349.8	7373.5	7578.5
12.5°	7972.1	7921.6	7875.6	7850.3	7640.9	7588.9	7480.5	7505.7	7514.6	7547.3	7750.8
15°	8273.7	8223.2	8209.8	8169.7	7961.8	7875.6	7724.1	7712.2	7724.1	7743.4	7945.4
17.5°	8157.8	8160.8	8235.1	8242.5	7972.1	7773.1	7667.6	7868.2	7887.5	8040.5	8171.2
20°	7938.0	7829.5	7440.4	7228.0	7259.2	7517.6	7326.0	7317.1	7357.2	7629.0	8291.5
22.5°	6611.5	6552.1	6766.0	6834.3	7080.9	7178.9	7635.0	7646.8	7687.0	7687.0	7880.1
25°	5708.4	6015.9	6431.8	7174.5	7097.2	7116.6	7302.2	8091.0	8166.7	8165.3	8137.0
27.5°	5901.5	5862.9	6485.3	6951.7	7502.8	7468.6	7266.6	7802.8	8138.5	8714.8	8581.2
30°	6133.2	6105.0	6151.0	6939.8	7853.3	7899.4	7712.2	7657.2	7771.6	8982.2	9089.2
32.5°	6348.6	6314.4	6366.4	6486.7	7361.6	8343.5	8199.4	8132.6	8174.2	8417.8	9742.7
35°	6538.7	6535.8	6595.2	6737.8	7483.5	8498.0	8698.5	8694.1	8805.5	9014.9	9837.8
37.5°	6673.9	6672.4	6720.0	6886.3	7054.2	7848.9	9166.4	9432.3	9610.5	9921.0	9610.5
40°	6672.4	6696.2	6821.0	7034.9	7257.7	7496.8	9372.9	10299.8	10513.7	10735.0	10218.1
42.5°	6532.8	6546.2	6766.0	7162.6	7438.9	7645.4	8552.9	11097.4	11336.6	11320.2	10696.4
45°	6403.6	6409.5	6654.6	7141.8	7590.4	7963.2	8385.1	11094.5	11740.6	11841.6	11146.5
47.5°	6235.7	6235.7	6477.8	7021.5	7727.1	8321.2	8833.7	9583.8	10258.2	12293.2	11519.3
50°	6020.3	6047.1	5750.0	6896.7	7792.4	8661.4	9213.9	9831.9	9925.5	10993.5	11865.4
52.5°	5677.2	5662.3	4493.3	6758.6	7819.2	8908.0	9609.1	10219.6	10270.1	10163.1	11526.7
55°	3578.3	3989.8	3973.4	6596.7	7802.8	9066.9	9912.1	10645.9	10788.5	10657.8	9696.7
57.5°	2161.3	2063.2	3395.6	6133.2	6266.9	9190.2	10323.5	11293.5	11418.3	11115.3	9860.1
60°	843.7	796.2	860.0	2791.1	4496.3	8550.0	10883.5	11981.2	12100.1	11550.5	9998.2
62.5°	105.5	90.6	77.2	1932.5	2857.9	6351.6	11180.6	12535.3	12557.6	11865.4	10025.0
65°	14.9	16.3	29.7	1723.1	2596.5	6243.1	11284.6	12761.1	12807.1	12092.7	9934.4
67.5°	5.9	7.4	23.8	1498.8	2278.6	5955.0	11027.6	12917.0	12970.5	12312.5	9846.7
69°	5.9	7.4	23.8	1347.3	2061.7	5637.1	10862.7	13055.2	13160.7	12316.9	9646.2
70°	5.9	7.4	22.3	1238.8	1892.4	5368.2	10703.8	13001.7	13086.4	12198.1	9423.4
72.5°	5.9	7.4	22.3	953.6	1439.4	4310.6	9698.2	12244.2	12201.1	11449.5	8555.9
75°	7.4	7.4	22.3	669.9	998.2	3065.9	8184.6	10873.1	10892.4	10192.8	7196.8
77.5°	7.4	7.4	22.3	426.3	629.8	1773.6	5926.8	8916.9	8971.8	8492.0	5389.0
80°	7.4	7.4	22.3	194.6	390.7	926.9	2914.4	5810.9	6106.5	5701.0	2957.4
82.5°	7.4	7.4	20.8	121.8	213.9	417.4	1149.7	1822.6	1804.8	1776.5	940.3
85°	5.9	5.9	16.3	86.2	142.6	242.1	638.7	817.0	806.6	714.5	485.7
87.5°	3.0	3.0	8.9	35.6	59.4	109.9	319.4	371.4	353.5	303.0	208.0
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°	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8	7239.8
2.5°	7321.5	7331.9	7381.0	7444.8	7464.1	7547.3	7560.7	7697.3	7718.1	7752.3	7767.2
5°	7395.8	7435.9	7542.9	7692.9	7820.6	7951.4	7955.8	8122.2	8165.3	8156.3	8199.4
7.5°	7501.3	7568.1	7731.5	7939.5	7985.5	8154.9	8143.0	8307.8	8310.8	8287.1	8352.4
10°	7663.2	7746.4	7894.9	8022.7	8110.3	8220.2	8205.4	8361.3	8339.0	8313.8	8386.6
12.5°	7829.5	7872.6	7963.2	8105.8	8125.1	8163.8	8144.5	8288.5	8264.8	8233.6	8304.9
15°	7975.1	7995.9	7995.9	8073.2	8024.1	8055.3	7990.0	8105.8	8050.9	8036.0	8104.3
17.5°	8163.8	8129.6	8059.8	8053.8	7926.1	7878.6	7780.5	7811.7	7707.7	7718.1	7753.8
20°	8376.2	8300.4	8116.2	7932.0	7695.9	7583.0	7388.4	7373.5	7277.0	7259.2	7293.3
22.5°	8454.9	8521.7	8184.6	7828.1	7421.1	7168.5	6938.3	6828.4	6687.3	6596.7	6608.5
25°	8694.1	8814.4	8288.5	7642.4	7097.2	6681.3	6335.2	6084.2	5871.8	5763.4	5785.6
27.5°	9017.9	9213.9	8348.0	7513.2	6672.4	6128.8	5549.5	5219.7	4999.9	4887.0	4884.0
30°	9481.3	9727.9	8462.3	7242.8	6200.1	5402.4	4687.9	4298.8	4119.0	4044.7	4050.7
32.5°	10060.6	10357.7	8700.0	7017.0	5686.1	4625.5	3811.5	3471.4	3389.7	3376.3	3368.9
35°	10828.6	11122.7	8888.6	6669.5	5019.2	3744.7	3059.9	2819.3	2832.7	2829.7	2838.6
37.5°	10703.8	11819.3	9104.0	6329.3	4221.5	2935.2	2473.2	2338.0	2342.5	2394.5	2404.9
40°	10234.4	11210.3	9424.9	5766.3	3288.7	2254.8	1950.3	1919.1	2046.9	2161.3	2182.1
42.5°	10602.8	10843.4	9467.9	5158.8	2406.3	1729.0	1631.0	1760.2	1966.7	2098.9	2122.6
45°	10971.2	11165.8	9218.4	4249.7	1726.0	1479.5	1552.2	1737.9	1966.7	2107.8	2124.1
47.5°	11345.5	11344.0	8927.3	3407.5	1411.1	1414.1	1532.9	1739.4	1978.6	2121.2	2130.1
50°	11583.2	11488.1	8166.7	2669.3	1313.1	1375.5	1522.5	1748.3	1975.6	2079.6	2084.0
52.5°	11702.0	11560.9	7495.3	2133.0	1267.0	1344.3	1524.0	1769.1	1959.2	2017.2	2014.2
55°	11501.5	11520.8	6939.8	1773.6	1224.0	1319.0	1531.4	1784.0	1966.7	2026.1	2026.1
57.5°	11251.9	11256.4	6497.1	1501.7	1180.9	1298.2	1540.4	1806.2	2103.3	2214.7	2198.4
60°	11076.6	10876.1	5870.3	1330.9	1131.9	1278.9	1552.2	1902.8	2424.2	2537.1	2498.4
62.5°	10788.5	10516.6	5225.6	1212.1	1076.9	1264.1	1559.7	2038.0	2467.3	2473.2	2378.1
65°	10283.4	9894.3	4218.5	1094.7	1020.5	1243.3	1555.2	2088.5	2272.7	2183.5	2156.8
67.5°	9552.6	9044.6	3306.5	977.4	958.1	1212.1	1584.9	1996.4	2146.4	2073.6	2038.0
69°	9096.6	8399.9	2745.0	907.6	918.0	1188.3	1599.8	1978.6	2101.8	2012.7	1971.1
70°	8750.5	7841.4	2324.7	861.5	883.8	1167.5	1570.1	1968.2	2081.0	1971.1	1922.1
72.5°	7430.0	6304.0	1488.4	754.6	794.7	1115.5	1489.9	1902.8	2035.0	1960.7	1899.8
75°	5744.0	4630.0	949.2	656.5	704.1	1038.3	1406.7	1856.8	2055.8	1922.1	1788.4
77.5°	3866.5	2586.1	724.9	551.1	597.1	937.3	1274.5	1727.5	1984.5	1867.1	1702.3
80°	1761.7	986.3	560.0	447.1	482.8	754.6	1099.2	1528.5	1876.1	1874.6	1755.7
82.5°	705.6	659.5	415.9	341.6	380.3	563.0	870.4	1308.6	1654.7	1726.0	1843.4
85°	411.5	415.9	276.3	237.7	283.7	414.4	620.9	1011.6	1345.8	1488.4	1587.9
87.5°	167.9	187.2	129.2	124.8	156.0	221.3	285.2	490.2	724.9	889.8	950.7
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)