

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: P591293

Luminaire Tested: **CTN-CA10-210-730-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591293  
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-CA10-210-730-U-T3-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20493 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 212.9  
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

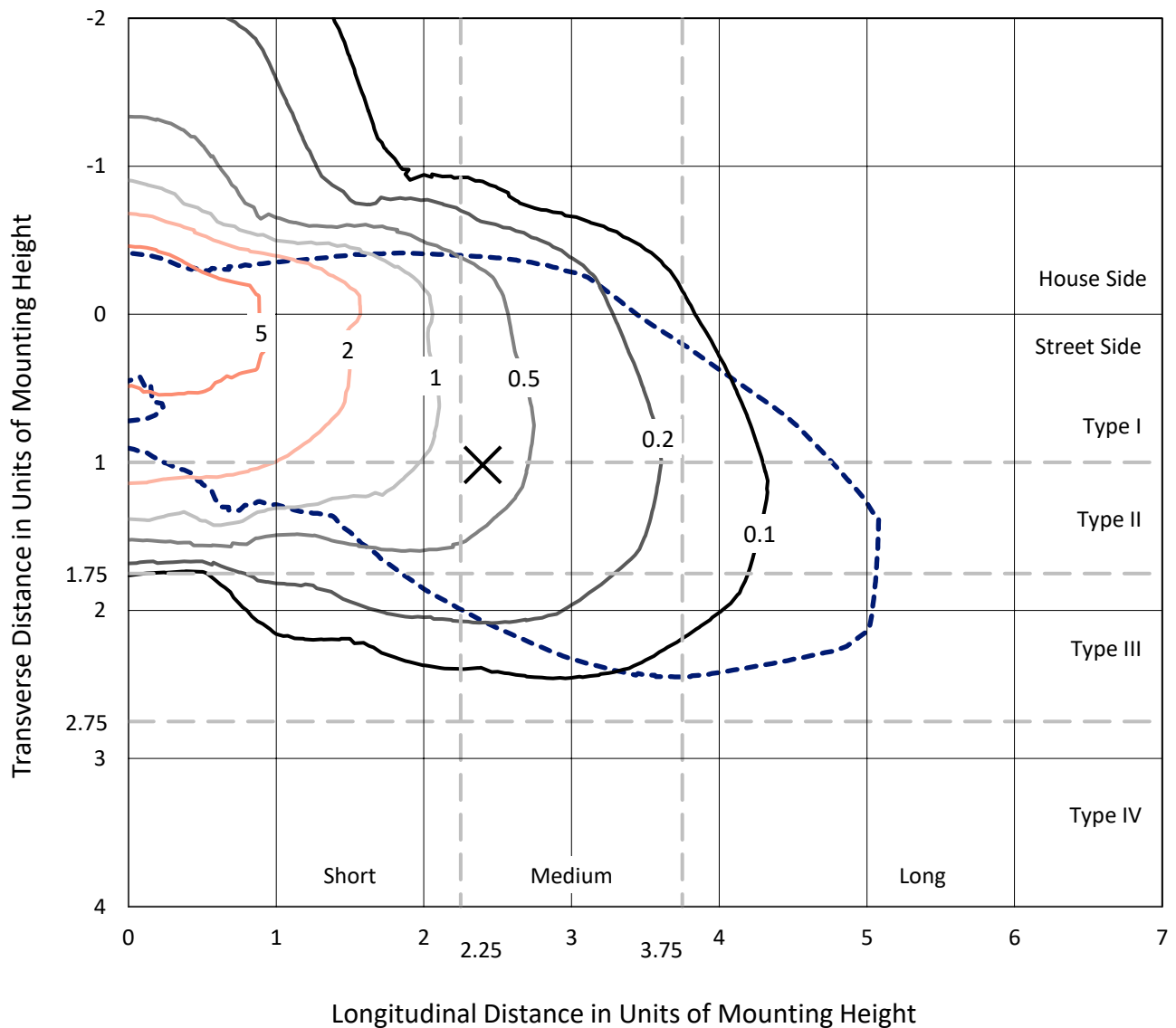




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### Iso-Footcandle Lines of Horizontal Illumination

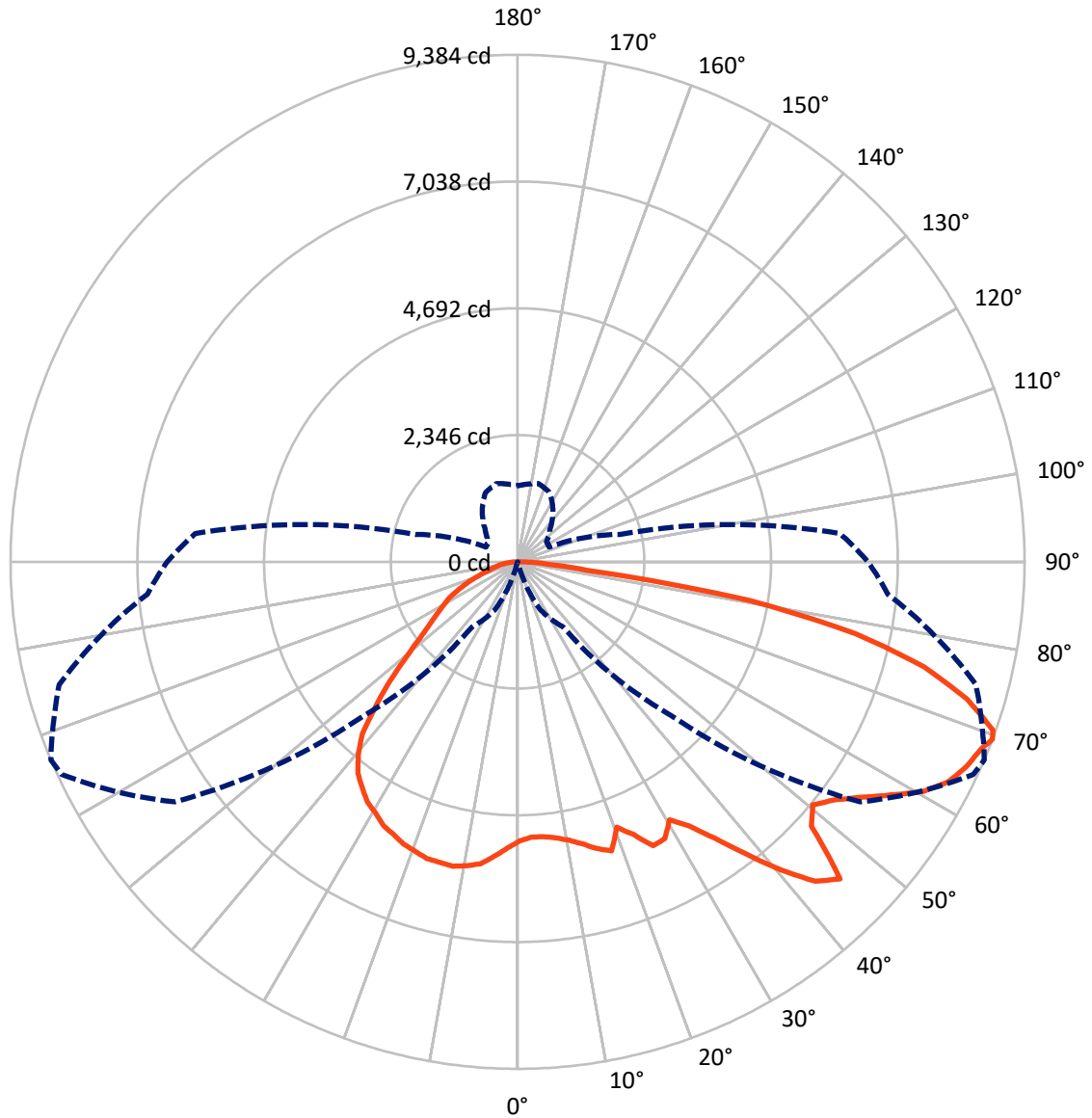
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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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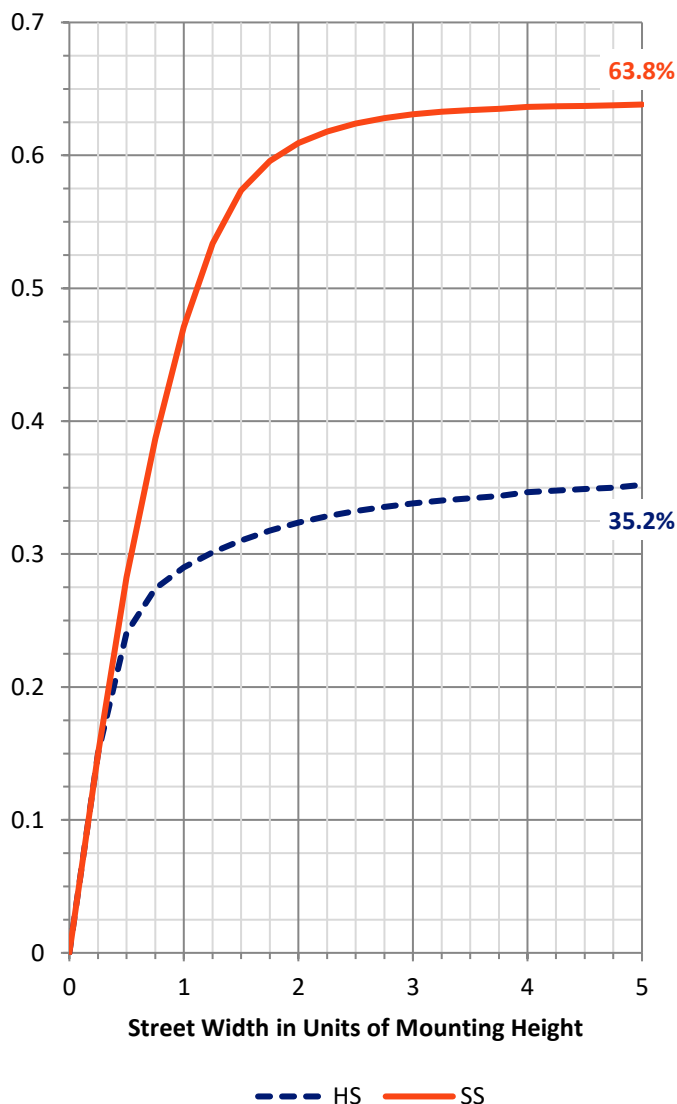
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7413.8	0.0	7413.8
	% Fixture	36.2	0.0	36.2
<b>Street Side</b>	Lumens	13079.2	0.0	13079.2
	% Fixture	63.8	0.0	63.8
<b>Total</b>	Lumens	20493.0	0.0	20493.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	516.3	2.5
10°-20°	1593.8	7.8
20°-30°	2352.4	11.5
30°-40°	2955.7	14.4
40°-50°	3466.8	16.9
50°-60°	3627.8	17.7
60°-70°	3241.0	15.8
70°-80°	2281.1	11.1
80°-90°	458.2	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°	20493.0	100.0
0°-180°	20493.0	100.0

**Coefficient of Utilization**

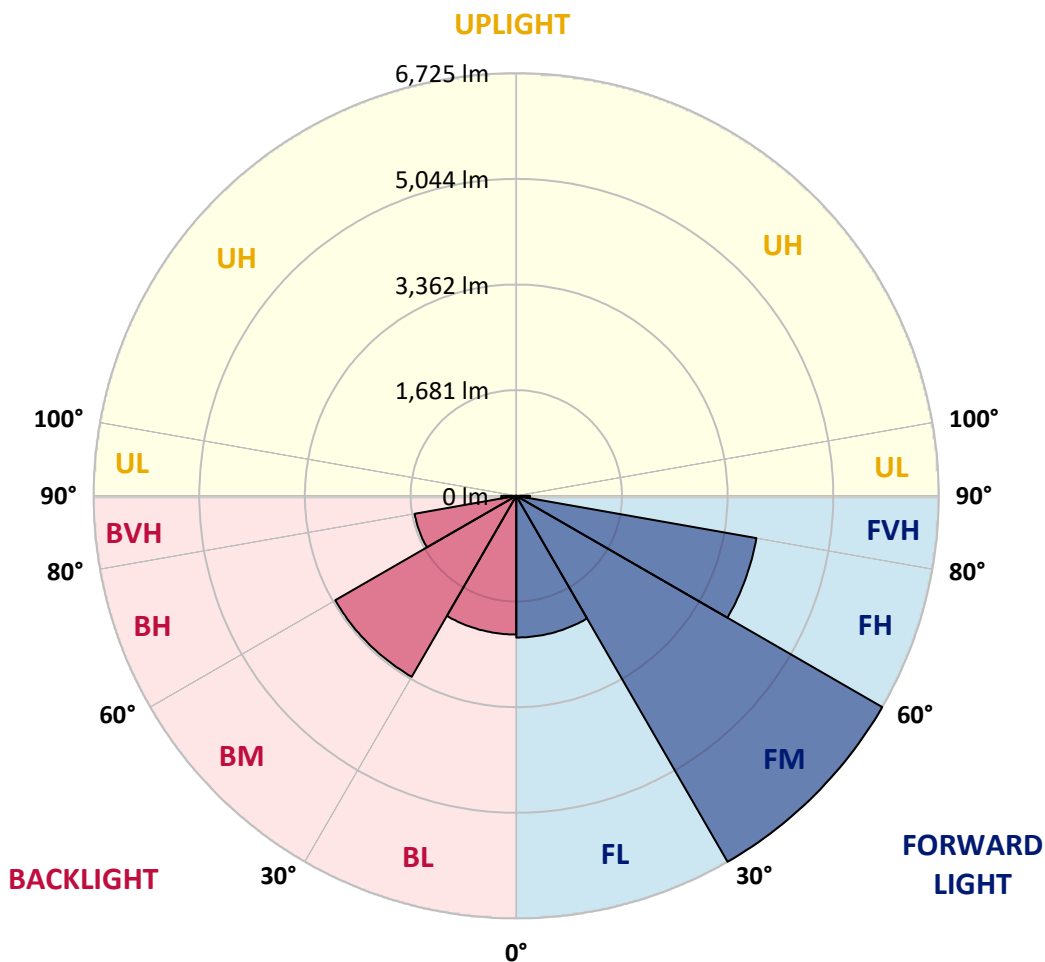


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2255.2	11.0			
FM (30°-60°)	6724.9	32.8			
FH (60°-80°)	3880.2	18.9			G2/5000
FVH (80°-90°)	219.0	1.1			G2/225
BL (0°-30°)	2207.3	10.8	B3/2500		
BM (30°-60°)	3325.4	16.2	B3/5000		
BH (60°-80°)	1641.9	8.0	B3/2500		G3/2500
BVH (80°-90°)	239.2	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4
2.5°	5039.5	5009.8	5023.6	5062.8	4981.2	5039.5	5018.3	5077.6	5099.9	5096.7	5181.4
5°	5079.7	5046.9	5052.2	5081.9	4992.9	5038.4	5018.3	5084.0	5109.4	5102.0	5217.4
7.5°	5222.7	5186.7	5175.1	5184.6	5088.2	5123.2	5079.7	5132.7	5160.2	5160.2	5291.6
10°	5448.3	5404.9	5379.5	5378.4	5265.1	5249.2	5196.3	5220.6	5240.7	5257.7	5403.8
12.5°	5684.5	5648.5	5615.7	5597.7	5448.3	5411.3	5333.9	5351.9	5358.3	5381.6	5526.7
15°	5899.5	5863.5	5854.0	5825.4	5677.1	5615.7	5507.6	5499.2	5507.6	5521.4	5665.5
17.5°	5816.9	5819.0	5872.0	5877.3	5684.5	5542.6	5467.4	5610.4	5624.2	5733.2	5826.5
20°	5660.2	5582.8	5305.3	5153.9	5176.1	5360.4	5223.8	5217.4	5246.0	5439.9	5912.2
22.5°	4714.3	4672.0	4824.5	4873.2	5049.0	5118.9	5444.1	5452.6	5481.2	5481.2	5618.9
25°	4070.4	4289.6	4586.2	5115.8	5060.7	5074.4	5206.8	5769.3	5823.3	5822.2	5802.1
27.5°	4208.1	4180.5	4624.3	4956.9	5349.8	5325.5	5181.4	5563.8	5803.2	6214.1	6118.8
30°	4373.3	4353.2	4386.0	4948.4	5599.8	5632.6	5499.2	5460.0	5541.5	6404.8	6481.0
32.5°	4526.9	4502.5	4539.6	4625.4	5249.2	5949.3	5846.6	5798.9	5828.6	6002.3	6947.0
35°	4662.4	4660.3	4702.7	4804.4	5336.1	6059.5	6202.5	6199.3	6278.7	6428.1	7014.8
37.5°	4758.8	4757.8	4791.7	4910.3	5030.0	5596.6	6536.1	6725.7	6852.8	7074.1	6852.8
40°	4757.8	4774.7	4863.7	5016.2	5175.1	5345.6	6683.3	7344.2	7496.8	7654.6	7286.0
42.5°	4658.2	4667.7	4824.5	5107.3	5304.3	5451.5	6098.7	7913.0	8083.5	8071.9	7627.0
45°	4566.0	4570.3	4745.0	5092.5	5412.3	5678.2	5979.0	7910.9	8371.6	8443.6	7948.0
47.5°	4446.4	4446.4	4619.0	5006.7	5509.8	5933.4	6298.8	6833.7	7314.6	8765.6	8213.8
50°	4292.8	4311.8	4100.0	4917.7	5556.4	6176.0	6570.0	7010.6	7077.3	7838.9	8460.6
52.5°	4048.1	4037.5	3204.0	4819.2	5575.4	6351.8	6851.7	7287.0	7323.0	7246.8	8219.1
55°	2551.5	2844.9	2833.3	4703.7	5563.8	6465.1	7067.8	7591.0	7692.7	7599.5	6914.2
57.5°	1541.1	1471.2	2421.2	4373.3	4468.6	6553.0	7361.2	8052.8	8141.8	7925.7	7030.7
60°	601.6	567.7	613.3	1990.2	3206.1	6096.5	7760.5	8543.2	8627.9	8236.0	7129.2
62.5°	75.2	64.6	55.1	1378.0	2037.8	4529.0	7972.3	8938.3	8954.2	8460.6	7148.3
65°	10.6	11.7	21.2	1228.6	1851.4	4451.7	8046.5	9099.3	9132.1	8622.6	7083.7
67.5°	4.2	5.3	16.9	1068.7	1624.8	4246.2	7863.2	9210.5	9248.6	8779.4	7021.2
69°	4.2	5.3	16.9	960.7	1470.1	4019.5	7745.7	9309.0	9384.2	8782.6	6878.2
70°	4.2	5.3	15.9	883.3	1349.4	3827.8	7632.3	9270.8	9331.2	8697.8	6719.3
72.5°	4.2	5.3	15.9	680.0	1026.3	3073.7	6915.3	8730.7	8700.0	8164.0	6100.8
75°	5.3	5.3	15.9	477.7	711.8	2186.1	5836.0	7753.1	7766.8	7268.0	5131.6
77.5°	5.3	5.3	15.9	304.0	449.1	1264.6	4226.1	6358.2	6397.3	6055.2	3842.6
80°	5.3	5.3	15.9	138.8	278.6	660.9	2078.1	4143.4	4354.2	4065.1	2108.8
82.5°	5.3	5.3	14.8	86.9	152.5	297.6	819.8	1299.6	1286.9	1266.8	670.4
85°	4.2	4.2	11.7	61.4	101.7	172.6	455.4	582.5	575.1	509.5	346.3
87.5°	2.1	2.1	6.4	25.4	42.4	78.4	227.7	264.8	252.1	216.1	148.3
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°	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4	5162.4
2.5°	5220.6	5228.0	5263.0	5308.5	5322.3	5381.6	5391.1	5488.6	5503.4	5527.8	5538.4
5°	5273.6	5302.2	5378.4	5485.4	5576.5	5669.7	5672.9	5791.5	5822.2	5815.9	5846.6
7.5°	5348.8	5396.4	5512.9	5661.2	5694.1	5814.8	5806.3	5923.9	5926.0	5909.1	5955.7
10°	5464.2	5523.5	5629.4	5720.5	5783.0	5861.4	5850.8	5962.0	5946.1	5928.1	5980.0
12.5°	5582.8	5613.6	5678.2	5779.8	5793.6	5821.2	5807.4	5910.1	5893.2	5870.9	5921.8
15°	5686.6	5701.5	5701.5	5756.5	5721.6	5743.8	5697.2	5779.8	5740.7	5730.1	5778.8
17.5°	5821.2	5796.8	5747.0	5742.8	5651.7	5617.8	5547.9	5570.1	5496.0	5503.4	5528.8
20°	5972.6	5918.6	5787.3	5655.9	5487.5	5407.0	5268.3	5257.7	5188.8	5176.1	5200.5
22.5°	6028.8	6076.4	5836.0	5581.8	5291.6	5111.5	4947.3	4869.0	4768.3	4703.7	4712.2
25°	6199.3	6285.1	5910.1	5449.4	5060.7	4764.1	4517.3	4338.3	4186.9	4109.5	4125.4
27.5°	6430.2	6570.0	5952.5	5357.2	4757.8	4370.1	3957.0	3721.9	3565.1	3484.6	3482.5
30°	6760.6	6936.5	6034.0	5164.5	4420.9	3852.2	3342.7	3065.2	2937.1	2884.1	2888.3
32.5°	7173.7	7385.5	6203.5	5003.5	4054.5	3298.2	2717.8	2475.3	2417.0	2407.5	2402.2
35°	7721.3	7931.0	6338.0	4755.6	3578.9	2670.1	2181.9	2010.3	2019.8	2017.7	2024.1
37.5°	7632.3	8427.8	6491.6	4513.1	3010.1	2092.9	1763.5	1667.1	1670.3	1707.4	1714.8
40°	7297.6	7993.5	6720.4	4111.7	2345.0	1607.8	1390.7	1368.4	1459.5	1541.1	1555.9
42.5°	7560.3	7731.9	6751.1	3678.5	1715.8	1232.9	1163.0	1255.1	1402.3	1496.6	1513.5
45°	7823.0	7961.7	6573.2	3030.3	1230.7	1054.9	1106.8	1239.2	1402.3	1503.0	1514.6
47.5°	8089.9	8088.8	6365.6	2429.7	1006.2	1008.3	1093.1	1240.3	1410.8	1512.5	1518.8
50°	8259.3	8191.6	5823.3	1903.3	936.3	980.8	1085.6	1246.6	1408.7	1482.8	1486.0
52.5°	8344.1	8243.5	5344.5	1521.0	903.5	958.5	1086.7	1261.5	1397.0	1438.3	1436.2
55°	8201.1	8214.9	4948.4	1264.6	872.7	940.5	1092.0	1272.1	1402.3	1444.7	1444.7
57.5°	8023.2	8026.3	4632.8	1070.8	842.0	925.7	1098.4	1287.9	1499.8	1579.2	1567.6
60°	7898.2	7755.2	4185.8	949.0	807.1	911.9	1106.8	1356.8	1728.6	1809.0	1781.5
62.5°	7692.7	7498.9	3726.1	864.3	767.9	901.3	1112.1	1453.2	1759.3	1763.5	1695.7
65°	7332.6	7055.1	3008.0	780.6	727.6	886.5	1108.9	1489.2	1620.5	1557.0	1537.9
67.5°	6811.5	6449.2	2357.7	696.9	683.2	864.3	1130.1	1423.5	1530.5	1478.6	1453.2
69°	6486.3	5989.6	1957.3	647.1	654.6	847.3	1140.7	1410.8	1498.7	1435.2	1405.5
70°	6239.5	5591.3	1657.6	614.3	630.2	832.5	1119.5	1403.4	1483.9	1405.5	1370.6
72.5°	5297.9	4495.1	1061.3	538.1	566.7	795.4	1062.3	1356.8	1451.1	1398.1	1354.7
75°	4095.8	3301.4	676.8	468.1	502.0	740.4	1003.0	1324.0	1465.9	1370.6	1275.2
77.5°	2757.0	1844.0	516.9	392.9	425.8	668.3	908.8	1231.8	1415.0	1331.4	1213.8
80°	1256.2	703.3	399.3	318.8	344.2	538.1	783.8	1089.9	1337.7	1336.7	1251.9
82.5°	503.1	470.3	296.6	243.6	271.1	401.4	620.7	933.1	1179.9	1230.7	1314.4
85°	293.4	296.6	197.0	169.5	202.3	295.5	442.7	721.3	959.6	1061.3	1132.2
87.5°	119.7	133.5	92.1	89.0	111.2	157.8	203.4	349.5	516.9	634.4	677.9
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)