

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: P591098

Luminaire Tested: **CTN-CA10-210-722-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-722-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17422 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

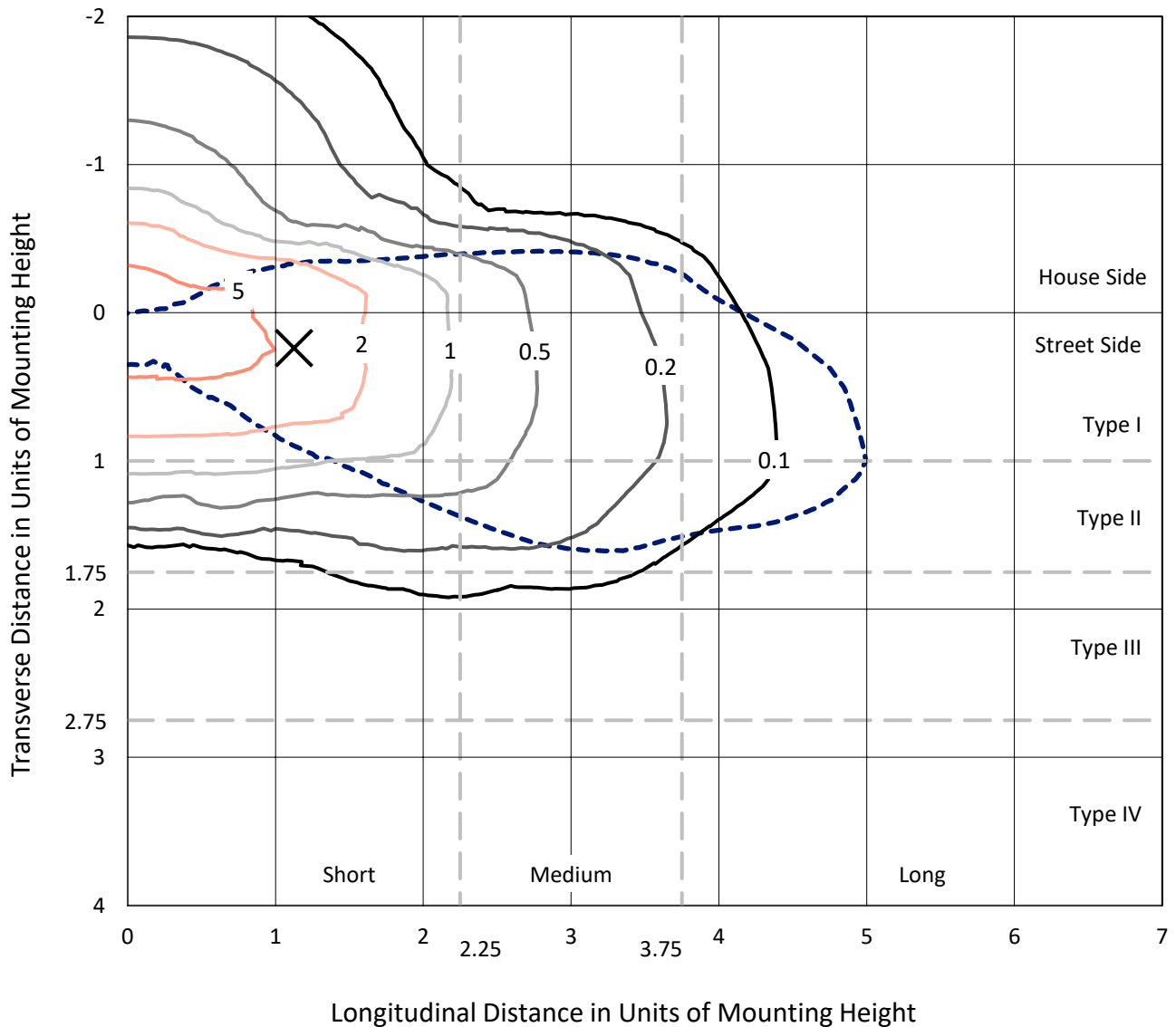
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591098
 CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

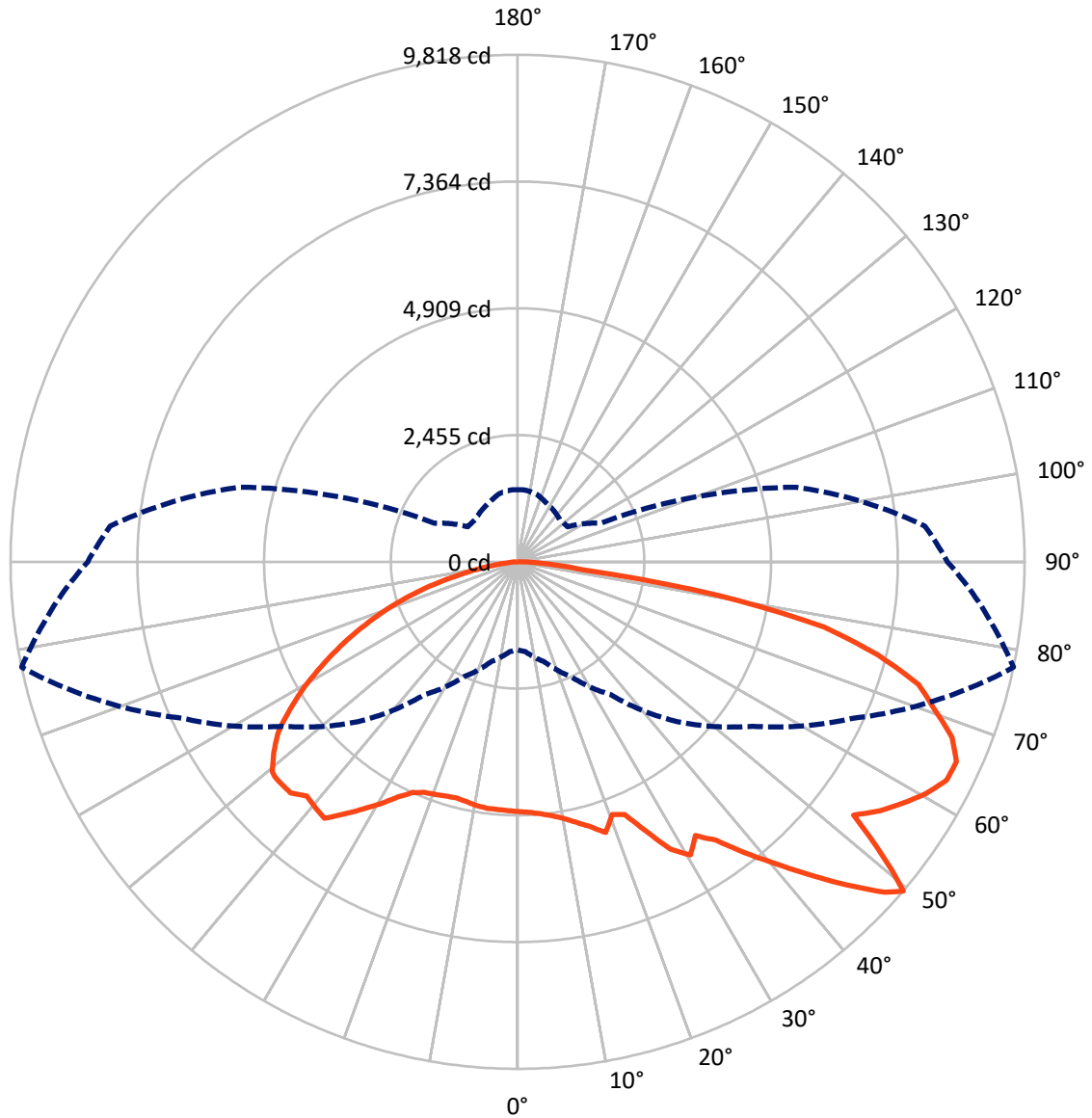
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
 Type II - Short - N/A

REPORT NUMBER: P591098
CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

REPORT NUMBER: P591098
 CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

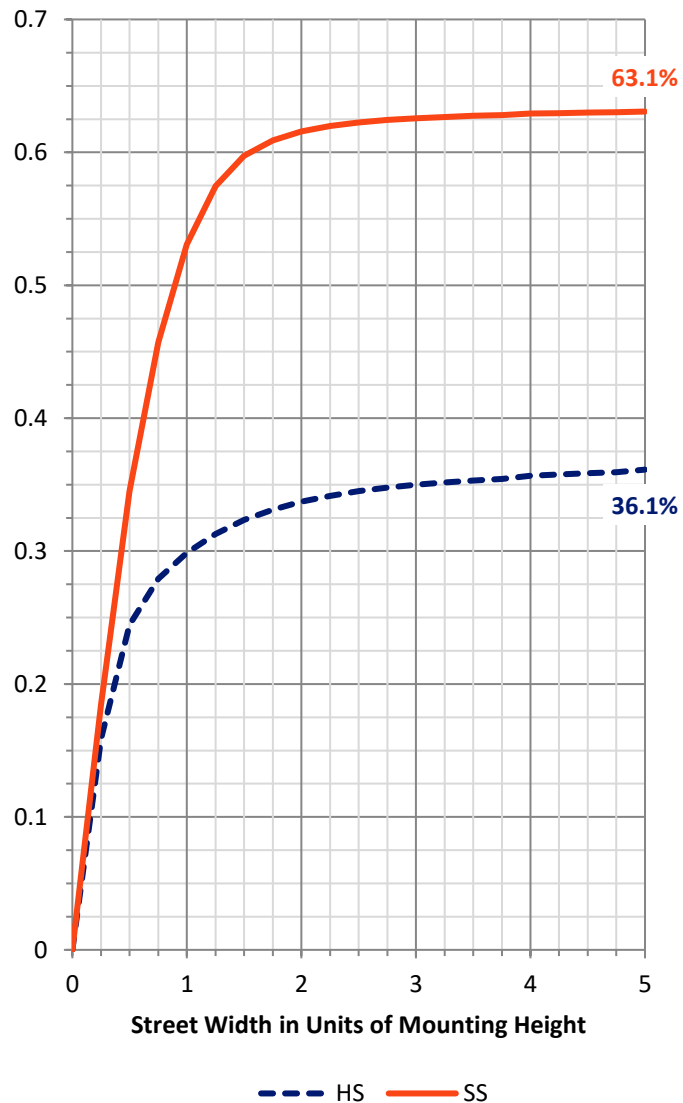
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6450.7	0.0	6450.7
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	10971.3	0.0	10971.3
	% Fixture	63.0	0.0	63.0
Total	Lumens	17422.0	0.0	17422.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.9	2.7
10°-20°	1380.1	7.9
20°-30°	1970.0	11.3
30°-40°	2536.1	14.6
40°-50°	2974.9	17.1
50°-60°	3068.9	17.6
60°-70°	2786.6	16.0
70°-80°	1850.6	10.6
80°-90°	385.9	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°	17422.0	100.0
0°-180°	17422.0	100.0

Coefficient of Utilization

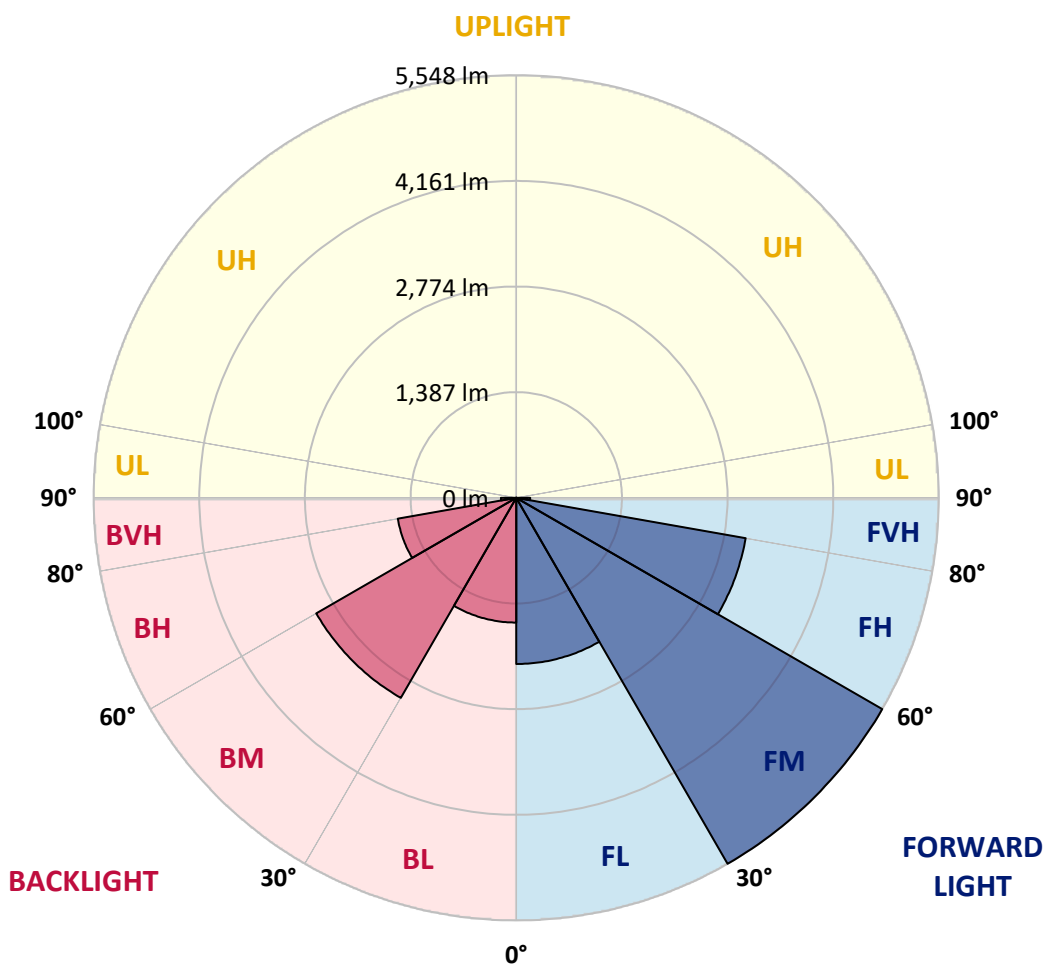


REPORT NUMBER: P591098
 CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2181.5	12.5			
FM (30°-60°)	5547.7	31.8			
FH (60°-80°)	3058.2	17.6			G2/5000
FVH (80°-90°)	183.9	1.1			G2/225
BL (0°-30°)	1637.6	9.4	B3/2500		
BM (30°-60°)	3032.2	17.4	B3/5000		
BH (60°-80°)	1579.0	9.1	B3/2500		G3/2500
BVH (80°-90°)	202.0	1.2			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





REPORT NUMBER: P591098

CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9
2.5°	5035.7	4997.0	5009.3	5030.4	4934.6	4955.7	4914.4	4931.1	4880.1	4860.8	4869.6
5°	5391.8	5350.5	5365.4	5372.4	5233.5	5177.3	5048.0	5020.8	4940.8	4905.6	4902.1
7.5°	5567.6	5522.8	5526.3	5530.7	5419.9	5427.8	5310.9	5171.1	5022.5	4968.9	4945.2
10°	5856.8	5794.4	5773.3	5764.5	5615.1	5552.7	5450.7	5374.2	5142.1	5061.2	5000.6
12.5°	6035.3	5989.6	5989.6	5980.8	5822.5	5774.2	5592.2	5511.3	5282.8	5186.9	5082.3
15°	6067.8	6037.1	6076.6	6068.7	5965.0	5908.7	5827.8	5659.0	5425.2	5325.8	5202.8
17.5°	5700.3	5618.6	5462.1	5485.8	5486.7	5601.0	5545.6	5661.7	5593.1	5512.2	5379.5
20°	4681.4	4709.6	4960.1	4899.5	4876.6	5119.2	5367.2	5374.2	5237.9	5224.7	5404.1
22.5°	4078.3	3978.1	4256.8	4662.1	4687.6	5012.0	5301.2	5649.4	5431.3	5314.4	5177.3
25°	3473.5	3510.4	3930.6	4455.5	4826.5	4898.6	5230.9	5786.5	5879.7	5771.6	5485.0
27.5°	3368.9	3367.1	3550.0	4132.0	4893.3	5164.1	5274.0	5709.1	6358.8	6298.2	5936.0
30°	3346.0	3331.9	3427.8	3911.3	4583.0	5403.2	5612.4	5768.0	6321.0	6590.9	6440.6
32.5°	3245.8	3233.5	3335.5	3588.7	4334.2	5578.1	5935.1	6167.2	6192.7	6320.1	6973.3
35°	3088.4	3098.1	3239.6	3514.8	3974.6	5157.9	6265.6	6616.4	6708.7	6620.8	6711.4
37.5°	2927.5	2938.1	3077.0	3389.1	3912.2	4982.1	6479.3	7050.7	7242.4	7148.3	6729.8
40°	2728.0	2744.7	2905.6	3256.3	3840.1	4585.6	6040.6	7543.9	7804.1	7681.1	7215.1
42.5°	2501.2	2508.2	2691.1	3054.1	3748.7	4609.3	5587.8	7999.3	8349.2	8281.5	7693.4
45°	2304.2	2304.2	2470.4	2793.9	3540.3	4564.5	5396.2	7660.0	9018.2	8922.4	8172.5
47.5°	2036.1	2059.8	2255.0	2575.9	3295.0	4460.8	5506.1	6897.7	9641.5	9561.5	8653.4
49°	1705.5	1746.0	2003.6	2456.3	3137.7	4374.6	5550.0	7166.8	9211.6	9818.2	8965.5
50°	1570.1	1591.2	1593.9	2371.0	3020.7	4296.4	5570.2	7373.4	8486.3	9404.2	9184.4
52.5°	1359.2	1226.4	1090.1	2134.6	2786.0	4007.1	5582.5	7934.2	8312.3	8147.9	9013.8
55°	574.1	751.7	955.6	1746.0	2532.8	3649.3	5542.1	8550.5	8694.7	8513.6	7728.5
57.5°	434.3	462.4	513.4	1354.8	1814.5	3241.4	5405.8	8940.9	9017.3	8811.6	8042.4
60°	63.3	65.1	91.4	549.5	1039.1	2313.9	4915.3	8929.4	9257.4	9099.1	8313.2
62.5°	26.4	27.3	35.2	450.1	800.9	1781.1	4487.1	8780.0	9490.3	9320.7	8567.2
65°	4.4	5.3	14.9	398.3	662.0	1664.2	4017.7	8809.9	9407.7	9337.4	8665.7
67.5°	3.5	4.4	14.1	357.8	545.9	1523.6	3554.4	8334.3	9106.1	9075.4	8402.8
70°	3.5	4.4	14.9	323.5	472.1	1342.4	2982.0	7675.8	8553.2	8565.5	7961.5
72.5°	4.4	4.4	14.9	289.2	410.6	1147.3	2359.6	6796.6	8051.2	8118.9	7333.8
75°	4.4	4.4	14.1	251.4	352.5	956.5	1699.4	4997.9	7220.4	7200.2	6431.8
77.5°	4.4	4.4	14.1	199.6	292.8	786.8	1106.8	2815.0	5979.0	6064.3	5377.7
80°	4.4	4.4	14.1	145.9	229.5	589.9	670.8	1440.9	3192.2	3951.7	3699.4
82.5°	4.4	4.4	14.1	98.5	157.4	340.2	386.8	729.7	1146.4	1256.3	1469.9
85°	3.5	3.5	10.5	58.9	80.9	120.4	186.4	388.6	626.8	655.0	639.1
87.5°	1.8	1.8	5.3	21.1	35.2	44.0	83.5	156.5	230.3	235.6	204.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P591098

CATALOG NUMBER: CTN-CA10-210-722-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9	4837.9
2.5°	4869.6	4841.4	4815.9	4820.3	4765.8	4750.0	4689.3	4721.0	4690.2	4663.0	4688.5
5°	4877.5	4843.2	4796.6	4751.8	4626.9	4568.9	4495.9	4514.4	4473.1	4440.5	4468.7
7.5°	4900.3	4858.1	4786.0	4658.6	4510.0	4417.7	4335.0	4415.9	4406.3	4381.6	4410.6
10°	4910.9	4874.8	4750.9	4601.4	4393.9	4335.9	4261.2	4260.3	4263.0	4267.3	4296.4
12.5°	4939.0	4884.5	4688.5	4514.4	4321.9	4204.1	4149.5	4193.5	4114.4	4067.8	4088.0
15°	5005.8	4906.5	4646.3	4392.2	4210.2	4112.6	3938.6	3953.5	3936.8	3891.1	3911.3
17.5°	5137.7	4968.0	4644.5	4314.8	4067.8	3908.7	3756.6	3684.5	3661.6	3665.1	3682.7
20°	5299.5	5077.0	4648.0	4215.5	3919.2	3734.6	3499.9	3449.7	3374.1	3375.9	3380.3
22.5°	5196.6	5202.8	4649.8	4102.1	3733.7	3502.5	3253.7	3155.2	3097.2	3082.3	3104.2
25°	5475.3	5447.2	4677.0	4041.4	3538.5	3228.2	2968.0	2842.3	2755.2	2748.2	2772.8
27.5°	5846.3	5795.3	4817.7	3910.4	3331.9	2899.4	2617.2	2522.3	2447.5	2421.2	2438.7
30°	6297.3	6237.5	5012.0	3808.4	3053.3	2546.0	2304.2	2239.2	2165.3	2117.0	2121.4
32.5°	6768.5	6641.0	5211.5	3722.3	2767.5	2236.5	2029.9	1971.9	1884.9	1822.5	1837.4
35°	7243.2	7062.1	5434.0	3570.2	2418.5	1964.0	1797.0	1718.7	1647.5	1591.2	1581.6
37.5°	6867.8	7554.5	5649.4	3428.6	2145.1	1756.5	1567.5	1512.1	1469.9	1426.0	1425.1
40°	6898.6	7056.0	5776.8	3178.1	1840.0	1543.8	1353.9	1373.2	1390.8	1357.4	1357.4
42.5°	7203.7	6979.5	5725.8	2845.8	1613.2	1331.0	1244.0	1322.2	1377.6	1353.9	1353.0
45°	7633.6	7342.6	5812.9	2471.3	1392.6	1200.0	1213.2	1309.0	1381.1	1376.7	1375.0
47.5°	8089.9	7755.8	5645.8	2026.4	1240.5	1159.6	1213.2	1289.7	1375.9	1396.1	1391.7
49°	8324.6	7919.3	5579.0	1767.1	1179.8	1154.3	1215.0	1273.9	1366.2	1397.0	1392.6
50°	8467.9	8007.2	5492.9	1619.4	1147.3	1155.2	1218.5	1264.2	1357.4	1391.7	1389.0
52.5°	8790.5	8140.8	5065.6	1362.7	1094.5	1157.8	1241.3	1254.5	1324.9	1361.8	1381.1
55°	8461.7	8445.9	4520.5	1244.9	1066.4	1151.7	1251.0	1263.3	1297.6	1317.8	1332.8
57.5°	8410.7	8578.7	3833.9	1181.6	1041.8	1142.9	1239.6	1262.4	1282.7	1279.1	1273.0
60°	8572.5	8694.7	3126.2	1119.1	1013.6	1128.8	1201.8	1235.2	1241.3	1232.6	1218.5
62.5°	8598.0	8726.4	2402.7	1055.8	982.9	1094.5	1146.4	1179.8	1179.8	1157.8	1152.6
65°	8479.3	8528.5	1770.6	982.9	946.0	1055.0	1081.3	1106.0	1117.4	1088.4	1090.1
67.5°	8139.1	7854.2	1344.2	895.8	901.1	1000.5	1018.9	1035.6	1038.3	1021.6	1019.8
70°	7455.1	7099.9	960.9	764.0	819.4	914.3	942.4	967.9	959.1	930.1	925.7
72.5°	6423.9	6108.3	653.2	611.9	720.9	831.7	849.3	850.1	832.5	853.6	868.6
75°	5526.3	4771.1	487.0	487.9	577.6	717.4	771.9	776.3	784.2	900.2	924.0
77.5°	4391.3	3108.6	415.0	385.1	443.1	596.9	683.1	714.7	948.6	1028.6	1018.0
80°	2697.2	1866.4	321.8	305.1	360.4	458.9	587.3	730.6	967.9	909.9	879.1
82.5°	1263.3	851.9	232.1	233.9	268.1	335.0	464.2	850.1	836.1	690.1	681.3
85°	488.8	294.5	140.7	159.1	180.2	226.8	356.1	838.7	649.7	584.6	541.6
87.5°	125.7	57.1	61.5	65.1	80.0	119.6	194.3	439.6	342.0	299.8	294.5
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)