

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: P591264

Luminaire Tested: **CTN-CA8-330-727-U-T1-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-727-U-T1-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26342 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

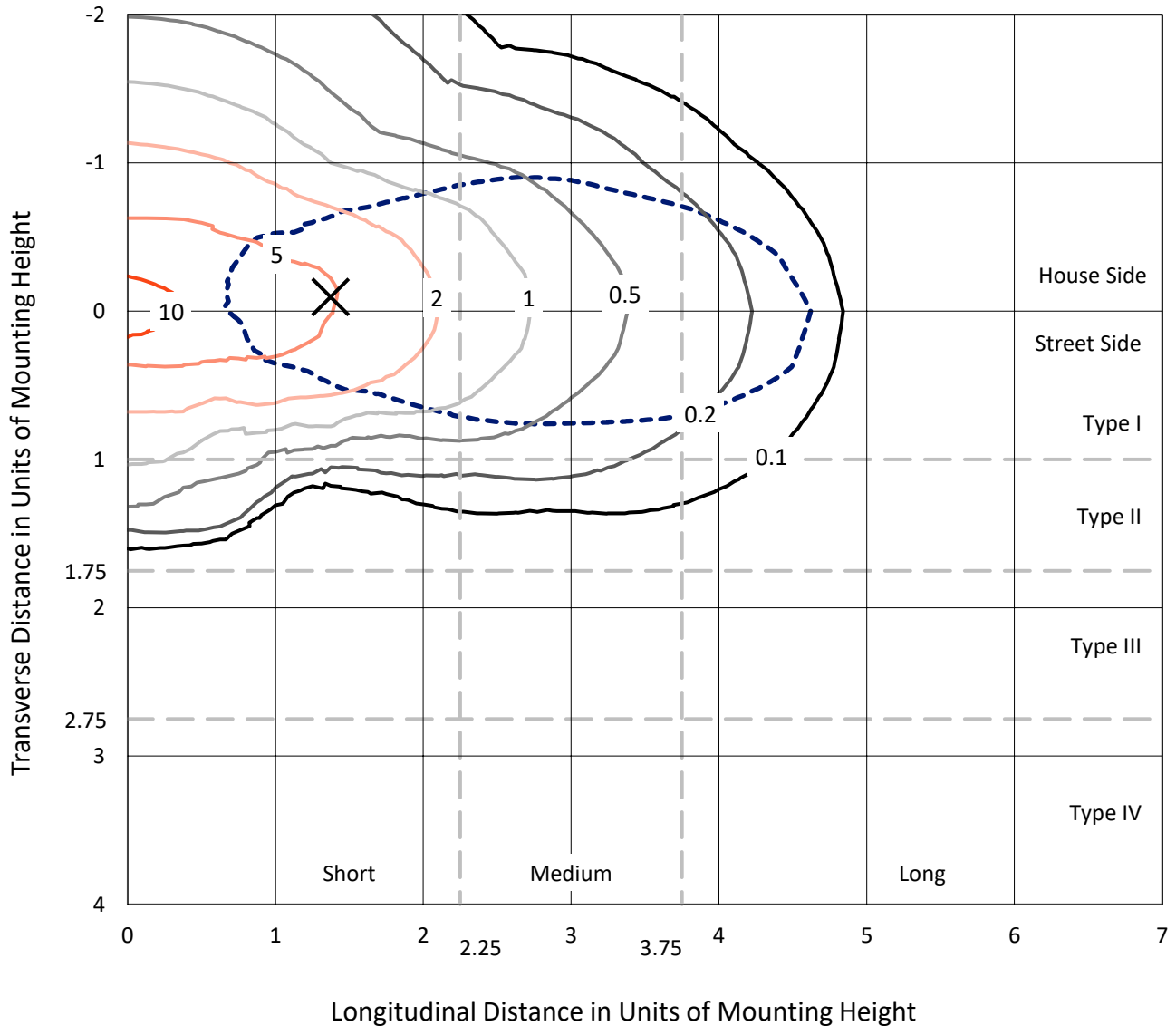
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

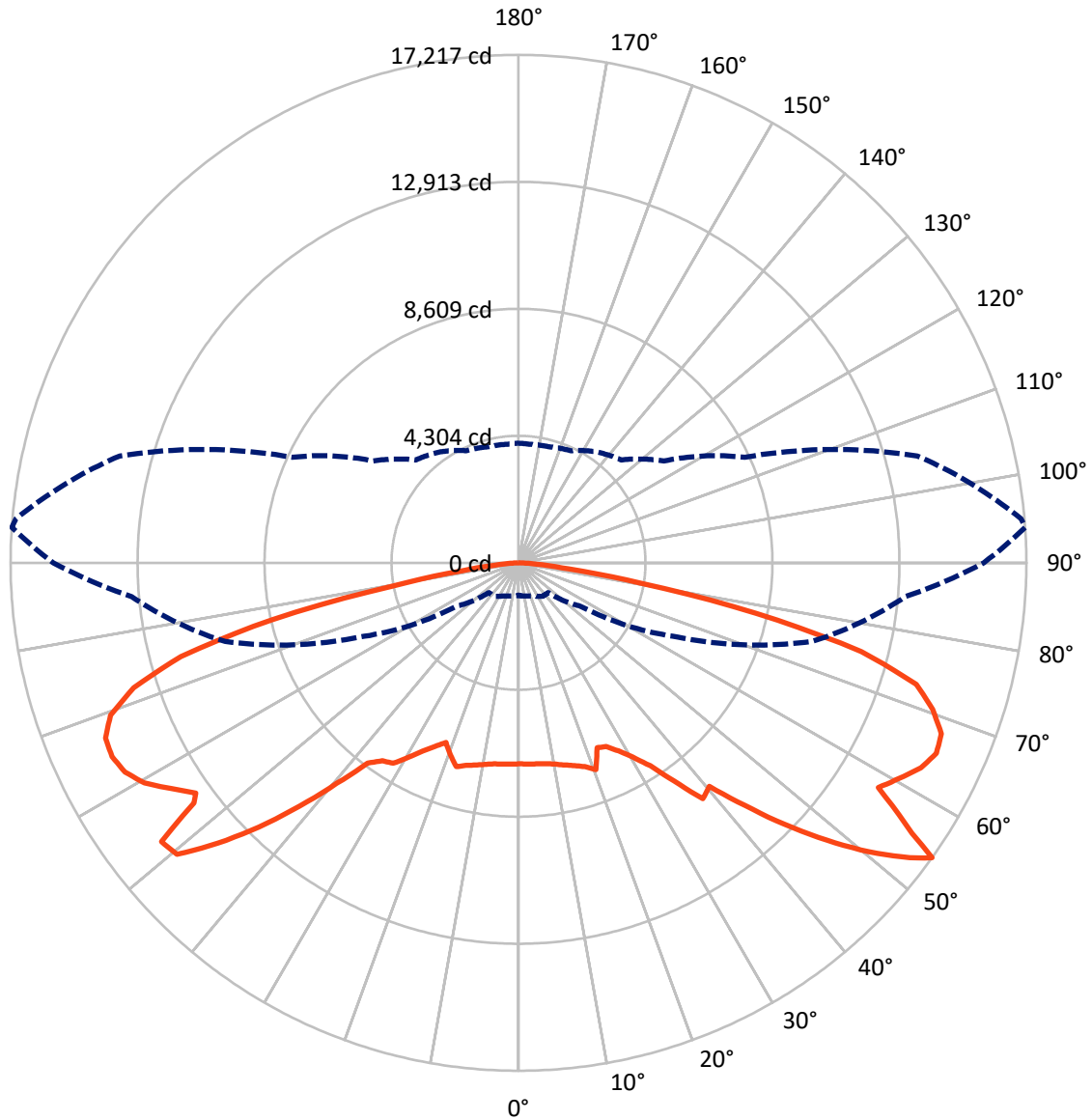
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 94-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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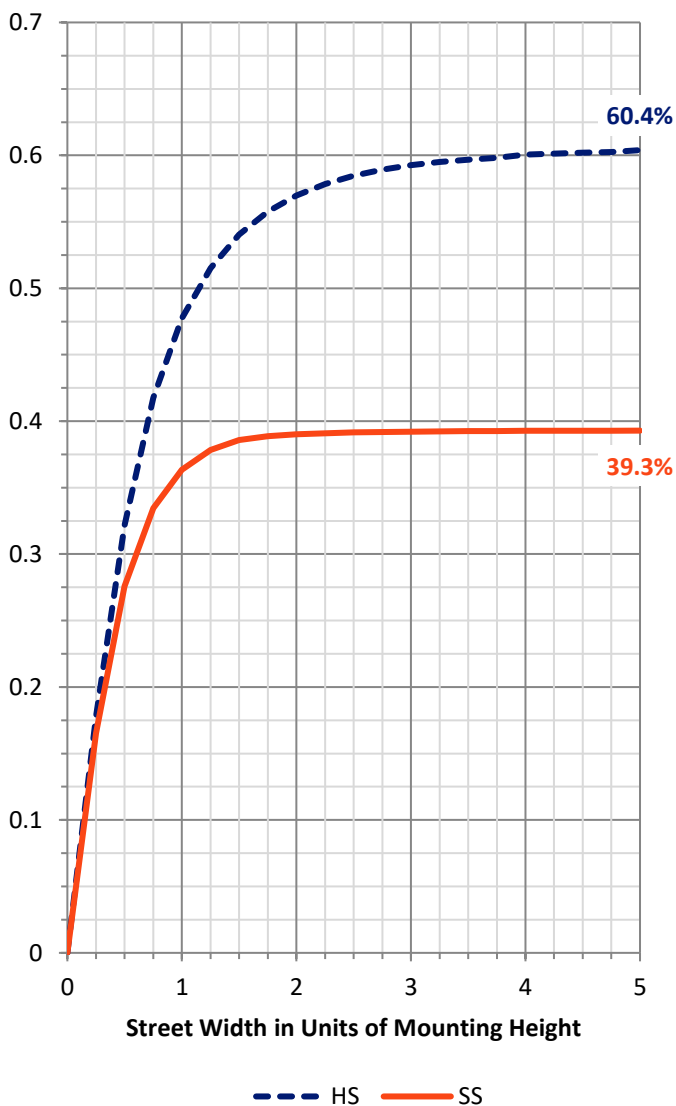
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16044.5	0.0	16044.5
	% Fixture	60.9	0.0	60.9
Street Side	Lumens	10297.5	0.0	10297.5
	% Fixture	39.1	0.0	39.1
Total	Lumens	26342.0	0.0	26342.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	650.0	2.5
10°-20°	1859.9	7.1
20°-30°	2656.5	10.1
30°-40°	3514.9	13.3
40°-50°	4627.1	17.6
50°-60°	5105.0	19.4
60°-70°	4600.0	17.5
70°-80°	2909.2	11.0
80°-90°	419.2	1.6
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°	26342.0	100.0
0°-180°	26342.0	100.0



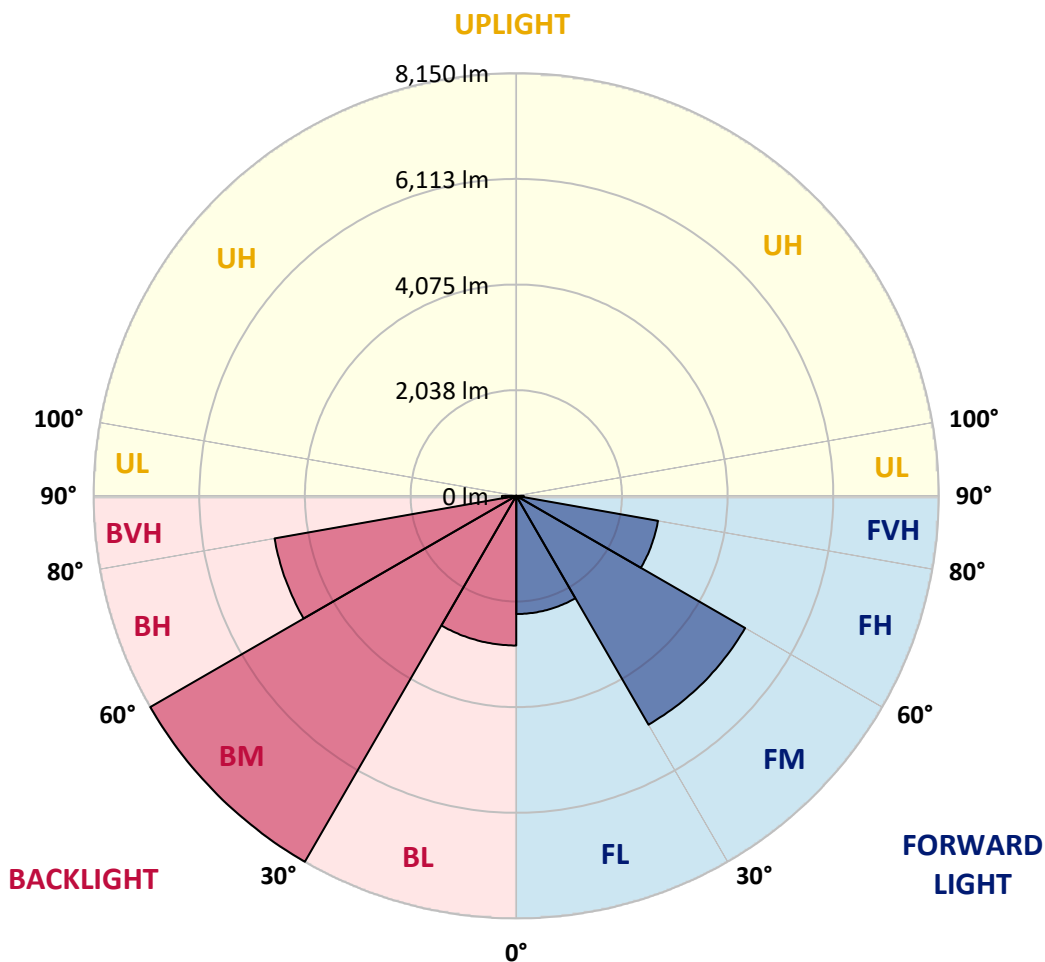
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 CATALOG NUMBER: CTN-CA8-330-727-U-T1-SSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2279.7	8.7			
FM (30°-60°)	5096.9	19.3			
FH (60°-80°)	2775.8	10.5			G2/5000
FVH (80°-90°)	145.2	0.6			G2/225
BL (0°-30°)	2886.8	11.0	B4/5000		
BM (30°-60°)	8150.1	30.9	B4/8500		
BH (60°-80°)	4733.4	18.0	B4/5000		G4/5000
BVH (80°-90°)	274.1	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4
2.5°	6824.2	6776.8	6783.2	6833.1	6726.8	6793.4	6762.7	6817.8	6796.0	6826.7	6849.8
5°	6764.0	6719.1	6730.7	6792.2	6707.6	6783.2	6739.6	6793.4	6801.1	6838.3	6860.0
7.5°	6714.0	6670.5	6678.1	6735.8	6682.0	6748.6	6723.0	6794.7	6796.0	6861.3	6878.0
10°	6664.0	6619.2	6629.5	6679.4	6644.8	6716.6	6733.2	6817.8	6837.0	6927.9	6929.2
12.5°	6557.7	6518.0	6523.1	6592.3	6593.6	6697.4	6730.7	6861.3	6901.0	7003.5	7013.8
15°	6138.8	6167.0	6274.6	6361.7	6442.4	6582.1	6696.1	6910.0	6963.8	7088.1	7117.5
17.5°	5124.2	5080.7	4846.2	4970.5	5358.7	5730.2	5927.4	6374.5	6875.4	7217.5	7255.9
20°	3593.4	3662.5	4030.2	4199.3	4476.0	5148.6	5766.0	6023.5	6186.2	6805.0	7287.9
22.5°	2850.3	2870.8	3397.4	4028.9	4236.4	4526.0	5258.7	6118.3	6373.2	6552.6	6632.0
25°	2653.1	2668.4	2753.0	3579.3	4145.5	4452.9	4774.5	5892.9	6593.6	6816.5	6911.3
27.5°	2487.8	2504.5	2587.7	2865.7	4062.2	4452.9	4818.0	5334.3	6807.5	7145.7	7226.4
30°	2364.8	2364.8	2450.7	2687.7	3405.0	4467.0	4909.0	5397.1	6474.5	7560.8	7632.5
32.5°	2252.1	2253.4	2346.9	2574.9	2950.3	4406.8	5037.1	5627.7	6215.7	7975.8	8161.6
35°	2150.9	2154.7	2239.3	2469.9	2835.0	3552.4	5179.3	5923.6	6712.7	7929.7	8966.1
37.5°	2065.1	2067.6	2140.6	2366.1	2737.6	2573.6	5271.5	6279.7	7380.2	8340.9	9133.9
40°	2003.6	1999.7	2052.2	2257.2	2595.4	2352.0	4461.9	6650.0	8173.1	9628.4	9923.0
42.5°	1942.1	1935.7	1988.2	2143.2	1775.5	2290.5	4134.0	7011.2	9086.5	11042.7	11305.3
45°	1870.3	1872.9	1924.1	1922.9	1680.7	2208.5	4169.8	6174.7	10064.0	12489.0	12823.4
47.5°	1831.9	1820.4	1846.0	1396.3	1602.6	2095.8	4154.5	5732.7	10926.1	13871.3	14203.1
50°	1760.2	1757.6	1293.9	1323.3	1524.5	1966.4	3913.6	5891.6	9859.0	15152.3	15488.0
52.5°	1652.6	1459.1	1200.3	1272.1	1446.3	1814.0	2795.3	5956.9	9832.1	15025.5	16685.7
54°	1097.9	1124.8	1161.9	1236.2	1389.9	1425.8	2557.0	5951.8	10299.7	13162.8	15769.8
55°	629.0	881.4	1131.2	1206.8	1350.2	997.9	2464.7	5924.9	10598.2	13243.5	14215.9
57.5°	544.4	547.0	622.6	1006.9	693.1	855.7	2203.4	5705.8	11156.7	13985.3	14263.3
60°	47.4	46.1	52.5	71.7	91.0	199.8	1109.4	3660.0	10766.0	14622.0	15053.7
62.5°	19.2	20.5	25.6	34.6	55.1	89.7	917.2	3243.6	10931.2	15010.1	15482.8
65°	3.8	3.8	6.4	11.5	20.5	53.8	781.4	2888.8	10846.7	15136.9	15768.5
67.5°	0.0	0.0	3.8	9.0	16.7	43.6	676.4	2658.2	10363.7	15093.4	15662.2
70°	0.0	0.0	3.8	9.0	15.4	42.3	579.0	2453.2	9165.9	14637.3	15267.6
72.5°	0.0	0.0	3.8	7.7	14.1	38.4	495.8	2166.3	7769.6	13539.5	14397.8
75°	0.0	0.0	3.8	7.7	12.8	34.6	417.6	1858.8	6491.1	11669.1	12700.4
77.5°	0.0	0.0	3.8	7.7	11.5	30.7	327.9	1484.7	5097.3	8461.4	9014.8
80°	0.0	0.0	3.8	7.7	10.2	24.3	242.1	937.7	2827.3	4291.5	4519.6
82.5°	0.0	0.0	2.6	6.4	9.0	15.4	115.3	354.9	1332.3	1965.1	1906.2
85°	0.0	0.0	2.6	6.4	7.7	11.5	50.0	89.7	443.2	652.1	607.2
87.5°	0.0	0.0	2.6	5.1	6.4	7.7	12.8	15.4	140.9	188.3	194.7
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4	6811.4
2.5°	6834.4	6834.4	6833.1	6866.5	6824.2	6828.0	6788.3	6890.8	6879.3	6847.2	6885.7
5°	6842.1	6848.5	6847.2	6863.9	6830.6	6851.1	6796.0	6897.2	6880.5	6854.9	6894.6
7.5°	6874.1	6885.7	6876.7	6906.2	6839.6	6860.0	6803.7	6892.1	6875.4	6838.3	6880.5
10°	6943.3	6954.8	6936.9	6951.0	6880.5	6870.3	6801.1	6893.4	6857.5	6829.3	6881.8
12.5°	7033.0	7047.1	7011.2	7008.6	6919.0	6898.5	6798.6	6861.3	6808.8	6785.7	6833.1
15°	7132.9	7149.6	7107.3	7098.3	6999.7	6931.8	6788.3	6802.4	6726.8	6696.1	6746.0
17.5°	7263.6	7279.0	7246.9	7241.8	7113.7	6998.4	6774.2	6728.1	6621.8	6596.2	6623.1
20°	7482.6	7492.9	7450.6	7412.2	7223.9	7034.3	6751.2	6630.7	6468.0	6414.2	6445.0
22.5°	6810.1	6892.1	7723.5	7580.0	7305.9	7071.4	6693.5	6492.4	6264.4	6163.2	6183.7
25°	6898.5	6906.2	7221.3	7778.6	7395.5	7095.8	6625.6	6320.7	6006.9	5859.5	5885.2
27.5°	7218.7	7209.8	7085.5	7800.3	7501.9	7109.9	6541.1	6140.1	5751.9	5575.1	5581.6
30°	7633.8	7619.7	7431.4	7052.2	7654.3	7115.0	6466.8	5932.6	5525.2	5336.9	5331.7
32.5°	8201.3	8161.6	7869.5	7345.6	7009.9	7149.6	6361.7	5735.3	5308.7	5122.9	5108.8
35°	9072.4	8999.4	8467.8	7718.4	6898.5	7149.6	6218.2	5522.6	5108.8	4932.1	4921.8
37.5°	10152.4	10171.6	9232.6	8136.0	7070.1	6479.6	6046.6	5324.1	4935.9	4779.6	4779.6
40°	9958.9	10213.8	10120.3	8563.9	7246.9	6372.0	5862.1	5133.2	4792.4	4673.3	4688.7
42.5°	11236.1	11137.5	11150.3	8993.0	7371.2	6261.8	5662.3	4956.4	4665.6	4564.4	4575.9
45°	12653.0	12541.5	10207.4	9377.3	7428.8	6097.8	5459.9	4774.5	4526.0	4441.4	4472.2
47.5°	14051.9	13952.0	11209.2	9283.8	7375.0	5846.7	5210.0	4616.9	4378.6	4318.4	4364.6
50°	15406.0	15265.0	12289.2	8298.7	7184.2	5499.6	4955.1	4451.7	4250.5	4214.7	4249.3
52.5°	16614.0	16427.0	13383.2	8447.3	6275.9	5148.6	4728.4	4292.8	4134.0	4094.3	4128.8
54°	17217.4	17103.4	13994.2	8463.9	6015.8	4930.8	4592.6	4191.6	4068.6	4035.3	4054.5
55°	16190.0	16418.0	14356.8	8449.8	5827.5	4798.8	4502.9	4125.0	4022.5	3986.6	4005.9
57.5°	14377.3	14131.3	13422.9	8276.9	5315.1	4468.3	4240.3	3955.9	3885.4	3839.3	3866.2
60°	14833.3	14788.5	12253.3	7896.4	4755.3	4098.1	3981.5	3758.6	3711.2	3672.8	3708.7
62.5°	15309.9	15280.4	12440.3	7305.9	4198.0	3734.3	3684.3	3528.0	3499.8	3483.2	3492.2
65°	15567.4	15379.1	12435.2	6515.4	3686.9	3361.5	3353.8	3237.2	3250.0	3242.3	3279.5
67.5°	15458.5	15257.4	11885.6	5945.4	3206.5	2936.2	2960.5	2911.8	2959.2	2973.3	3001.5
70°	14889.7	14955.0	10687.8	5395.8	2728.6	2472.4	2549.3	2542.9	2612.1	2665.9	2710.7
72.5°	14103.1	13852.0	8958.4	4586.2	1997.2	1758.9	1892.1	1981.8	2058.7	2122.7	2165.0
75°	12003.5	11708.8	6614.1	3575.4	1446.3	1213.2	1249.0	1288.7	1338.7	1486.0	1573.1
77.5°	8229.5	8106.5	4756.6	2696.6	921.1	731.5	871.1	950.5	992.8	986.4	1001.8
80°	4219.8	4198.0	2815.8	1612.8	621.3	535.5	634.1	641.8	709.7	762.2	764.8
82.5°	1701.2	1785.8	1124.8	883.9	431.7	404.8	447.1	503.5	561.1	591.8	599.5
85°	602.1	588.0	342.0	415.1	274.1	283.1	316.4	380.5	440.7	448.4	431.7
87.5°	161.4	167.8	73.0	152.4	149.9	164.0	181.9	207.5	251.1	263.9	251.1
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)