

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: P591142

Luminaire Tested: **CTN-CA10-760-722-U-T4-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591142
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-722-U-T4-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D 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: 55073 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type IV - Short
BUG Rating: B5 - U0 - G5

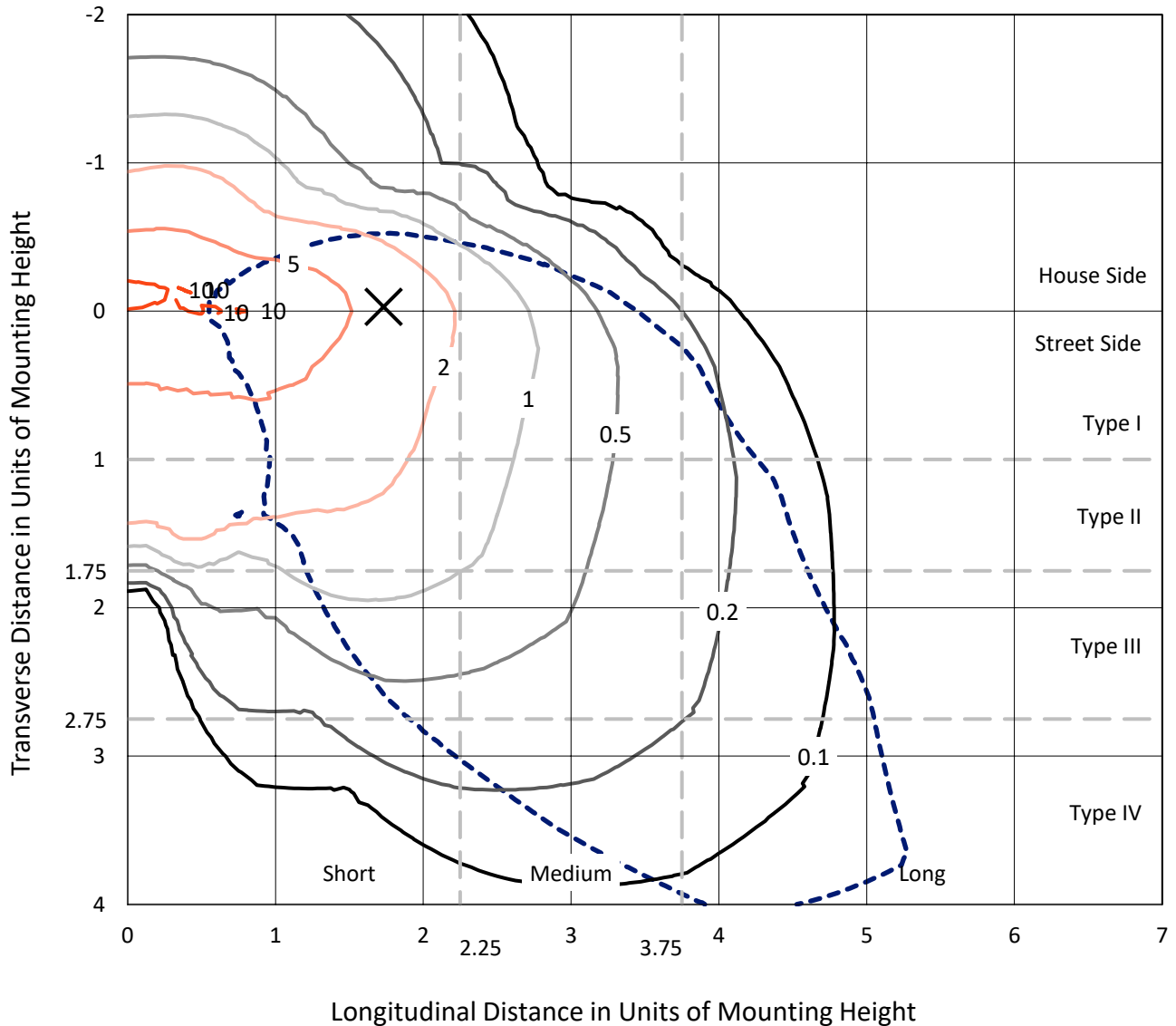
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

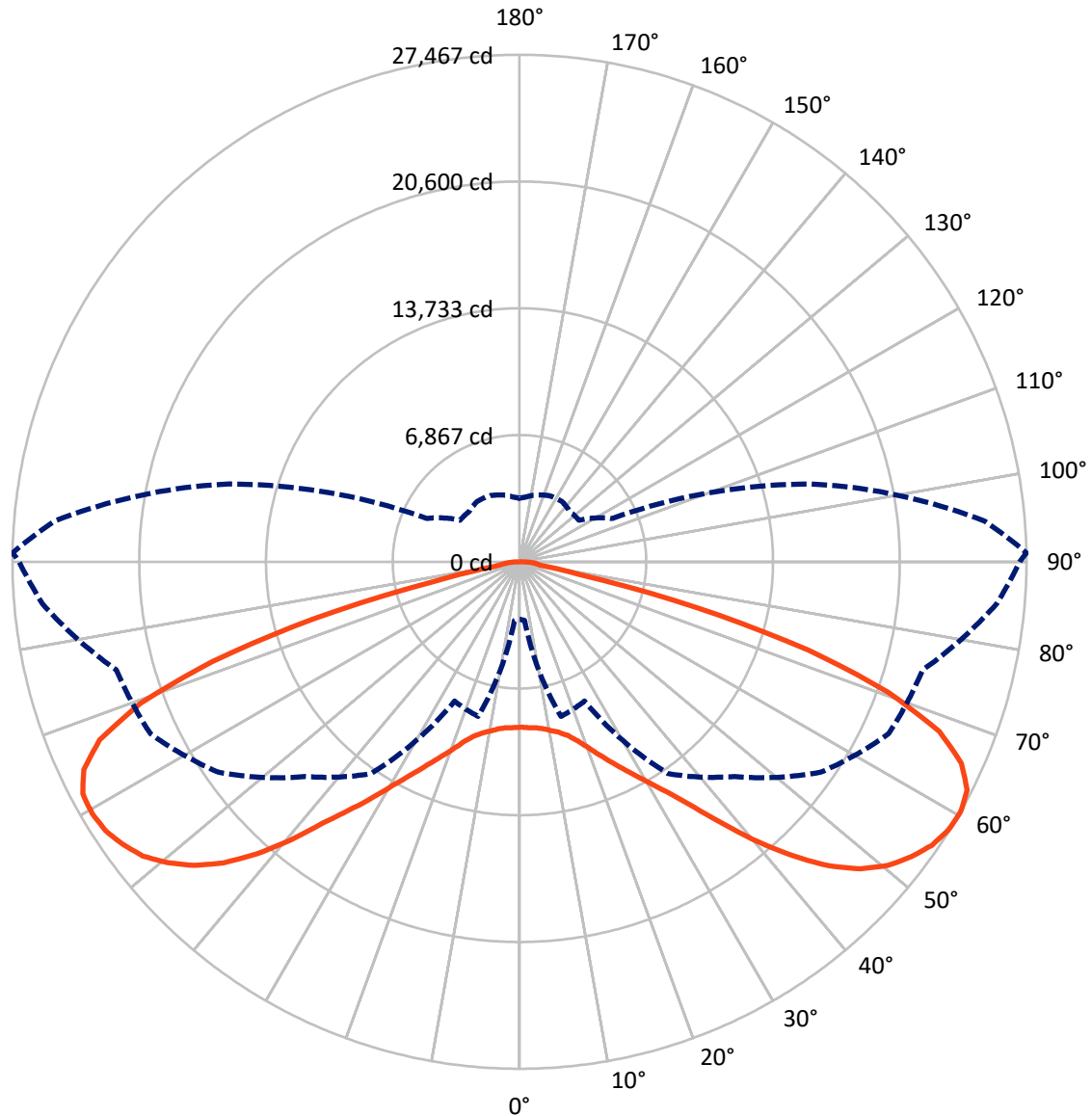
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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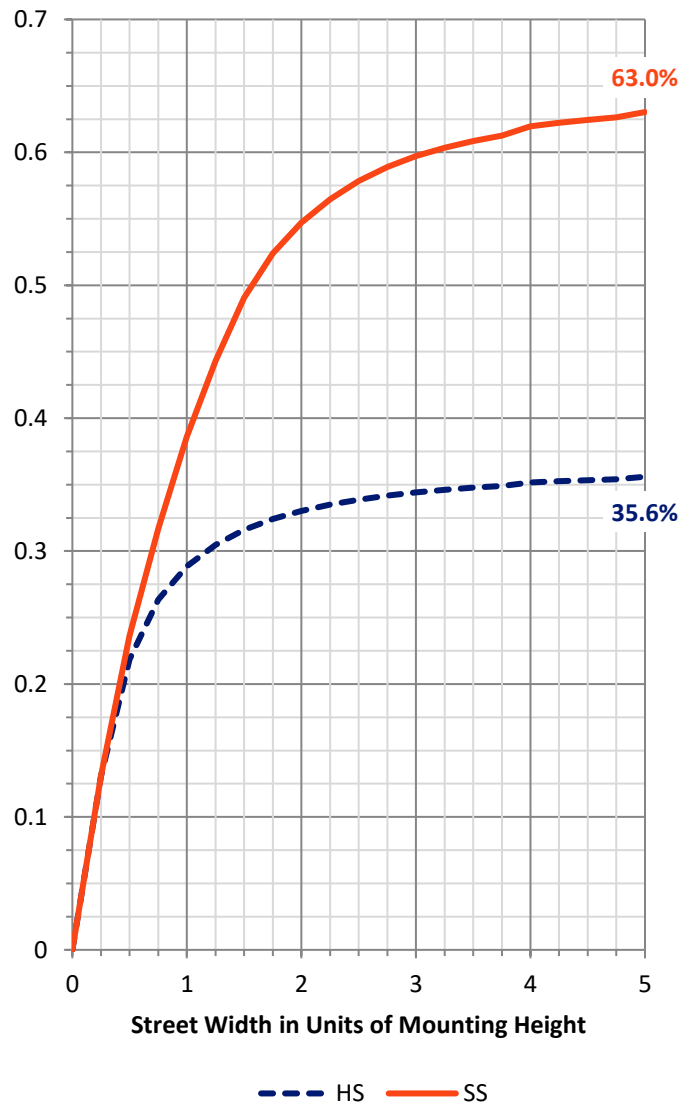
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20000.5	0.0	20000.5
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	35072.5	0.0	35072.5
	% Fixture	63.7	0.0	63.7
Total	Lumens	55073.0	0.0	55073.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	873.3	1.6
10°-20°	2678.3	4.9
20°-30°	4390.3	8.0
30°-40°	6200.5	11.3
40°-50°	8728.6	15.8
50°-60°	10983.2	19.9
60°-70°	11055.3	20.1
70°-80°	8133.2	14.8
80°-90°	2030.3	3.7
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°	55073.0	100.0
0°-180°	55073.0	100.0

Coefficient of Utilization

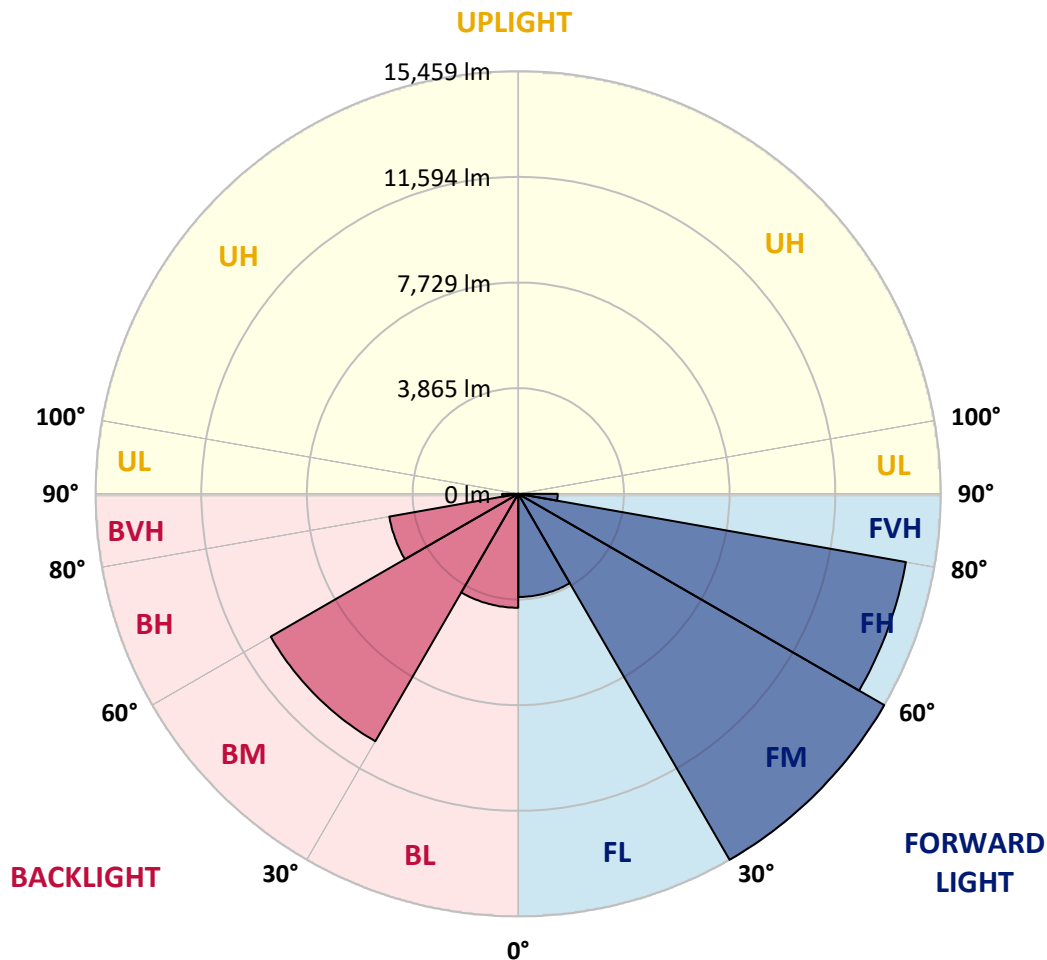


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3773.1	6.9			
FM (30°-60°)	15458.9	28.1			
FH (60°-80°)	14398.4	26.1			G5
FVH (80°-90°)	1442.1	2.6			G5
BL (0°-30°)	4168.8	7.6	B4/5000		
BM (30°-60°)	10453.3	19.0	B5		
BH (60°-80°)	4790.1	8.7	B4/5000		G4/5000
BVH (80°-90°)	588.2	1.1			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9
2.5°	8868.4	8812.0	8814.7	8897.9	8771.8	8852.3	8833.5	8962.3	8938.1	8983.8	8994.5
5°	8806.7	8761.0	8761.0	8860.3	8774.5	8844.2	8785.2	8897.9	8938.1	9005.2	9018.6
7.5°	8830.8	8782.5	8801.3	8887.2	8790.6	8863.0	8857.6	8956.9	8981.1	9093.8	9109.9
10°	8873.7	8830.8	8836.2	8908.6	8844.2	8978.4	8954.2	9096.5	9093.8	9270.9	9284.3
12.5°	8798.6	8766.4	8766.4	8863.0	8900.6	9042.8	9091.1	9238.7	9254.8	9453.3	9469.4
15°	8680.5	8626.9	8707.4	8852.3	8930.1	9152.8	9236.0	9469.4	9512.4	9700.2	9740.5
17.5°	8433.7	8457.8	8683.2	8581.3	8227.1	8557.1	9472.1	9770.0	9863.9	10086.6	10183.2
20°	7668.9	7371.1	6780.8	6941.8	7671.6	8613.5	9802.2	10151.0	10357.6	10620.6	10784.3
22.5°	5793.3	5981.1	7084.0	7199.4	7231.6	7859.5	10263.7	10617.9	10891.6	11224.3	11441.7
25°	6008.0	5989.2	6367.5	7550.9	7583.1	7942.6	9662.6	11227.0	11473.9	11935.4	12152.8
27.5°	6206.5	6206.5	6185.1	7129.6	7948.0	8302.2	9976.6	10778.9	12238.6	12740.4	12995.3
30°	6536.6	6547.3	6426.6	6423.9	8248.5	8632.2	10583.0	10980.2	12914.8	13864.7	13923.8
32.5°	7191.3	7153.7	7003.5	6772.7	7135.0	9016.0	11176.0	11707.3	12262.8	15128.6	15074.9
35°	7663.6	7634.1	7526.7	7365.7	7199.4	9190.4	11731.5	12469.4	13379.0	15501.6	16531.9
37.5°	8235.1	8186.8	8066.1	7875.6	7768.2	7934.6	12303.0	13330.7	14774.4	15944.3	18176.8
40°	8860.3	8846.9	8661.8	8414.9	8267.3	8390.7	12740.4	14404.1	16505.1	17825.3	19990.8
42.5°	9340.6	9329.9	9177.0	9034.7	8965.0	9214.5	11653.7	15826.2	18485.4	19534.6	21737.6
45°	9772.7	9756.6	9751.2	9702.9	9759.2	10365.7	12845.1	16703.7	20430.8	21005.0	23326.1
47.5°	10100.0	10051.7	9914.9	9928.3	10086.6	11109.0	14084.8	15380.8	22008.6	22301.1	24565.8
50°	10878.2	10829.9	10357.6	10373.7	10679.6	12032.0	15152.7	16913.0	20540.8	23422.7	25515.7
52.5°	11573.2	11173.4	10915.8	10926.5	11345.1	13014.1	16365.6	18498.8	20192.0	24310.9	26283.1
55°	9995.4	9737.8	12244.0	11895.2	12125.9	14084.8	17543.6	19872.7	21149.9	24989.8	26723.2
57.5°	5865.7	5833.5	13475.6	13778.9	13510.5	15241.3	18735.0	21015.8	21989.8	25623.0	27018.4
60°	3112.7	3187.8	8667.1	8329.0	14004.3	16448.8	19888.8	22054.2	22612.4	25950.4	27098.9
62.5°	287.1	254.9	5696.7	6472.2	12552.6	18026.6	21257.3	23111.5	23033.6	26124.8	26956.7
65°	56.3	75.1	5589.4	6394.4	13947.9	20642.8	23492.5	23924.5	23261.7	25915.5	26210.7
67.5°	42.9	64.4	5280.8	6324.6	14803.9	21649.0	26065.8	24211.6	23275.1	25247.4	24568.5
70°	42.9	67.1	4660.9	5911.4	15209.1	21692.0	26674.9	24098.9	22974.6	23734.0	21474.6
72.5°	42.9	67.1	3915.0	5122.5	14519.5	20760.9	25606.9	23473.7	21855.7	20436.2	16749.3
75°	42.9	61.7	3072.4	4161.8	12549.9	19325.3	23774.2	20752.8	18396.9	14954.2	10746.7
77.5°	42.9	59.0	2264.7	3257.6	10473.0	17044.5	20675.0	17057.9	13867.4	7829.9	3955.2
80°	40.2	59.0	1379.2	2296.9	8068.7	13749.3	16247.5	12603.6	7287.9	1969.6	1143.1
82.5°	40.2	56.3	657.4	1470.5	5669.9	9823.6	10601.8	5398.8	1551.0	909.6	909.6
85°	34.9	51.0	351.5	799.6	3705.7	6440.0	5114.4	915.0	606.4	614.5	700.3
87.5°	21.5	26.8	166.4	359.6	2135.9	3442.7	1969.6	335.4	252.2	265.6	397.1
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):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9	8956.9
2.5°	9002.5	8989.1	9018.6	9112.6	9096.5	9163.5	9109.9	9203.8	9222.6	9195.7	9238.7
5°	9032.1	9050.8	9150.1	9238.7	9190.4	9297.7	9327.2	9458.7	9456.0	9431.9	9485.5
7.5°	9128.7	9179.6	9278.9	9388.9	9413.1	9499.0	9488.2	9654.6	9635.8	9625.1	9678.7
10°	9295.0	9372.8	9466.8	9649.2	9590.2	9735.1	9635.8	9748.5	9737.8	9710.9	9759.2
12.5°	9480.2	9587.5	9700.2	9866.6	9842.4	9839.7	9751.2	9786.1	9756.6	9692.2	9732.4
15°	9759.2	9890.7	10046.4	10153.7	10011.5	9957.8	9818.3	9743.1	9641.2	9490.9	9515.1
17.5°	10193.9	10349.6	10515.9	10534.7	10314.7	10175.2	9837.1	9568.7	9303.1	9101.8	9120.6
20°	10778.9	10921.1	11044.6	10956.0	10658.2	10346.9	9837.1	9413.1	8916.7	8546.4	8519.5
22.5°	11463.2	11506.1	11624.2	11406.8	10894.3	10459.6	9810.2	9179.6	8372.0	7878.2	7819.2
25°	12201.1	12195.7	12144.7	11693.9	11041.9	10397.9	9606.3	8779.8	7749.4	7234.2	7191.3
27.5°	13003.4	12936.3	12587.5	11935.4	10980.2	10175.2	9219.9	8106.3	7183.3	6740.5	6727.1
30°	13907.7	13730.6	13024.8	11959.6	10749.4	9735.1	8592.0	7427.4	6678.8	6284.3	6246.8
32.5°	14962.2	14616.1	13373.7	11881.8	10333.5	9064.3	7827.3	6893.5	6265.6	5833.5	5750.4
35°	16338.7	15732.3	13695.7	11626.8	9716.3	8267.3	7121.5	6418.5	5881.8	5439.1	5350.5
37.5°	18069.5	17178.6	14181.4	11253.9	9010.6	7556.2	6633.2	6104.6	5616.2	5092.9	4985.6
40°	19990.8	18879.9	14750.2	10891.6	8339.8	7027.6	6313.9	5957.0	5444.5	4870.2	4768.3
42.5°	21810.0	20591.8	15603.5	10422.0	7701.1	6603.7	6198.5	5914.0	5364.0	4773.6	4663.6
45°	23489.8	22097.2	16483.6	9949.8	7051.8	6257.5	6101.9	5787.9	5240.5	4660.9	4534.8
47.5°	24861.0	23283.2	17261.8	9461.4	6480.2	5986.5	5916.7	5546.4	5023.2	4478.5	4360.4
50°	25856.5	24192.8	17718.0	9007.9	5930.1	5715.5	5592.0	5203.0	4717.3	4263.8	4177.9
52.5°	26562.2	24979.0	17946.1	8956.9	5431.0	5350.5	5213.7	4848.8	4459.7	4108.2	4006.2
55°	27106.9	25408.4	17750.2	8659.1	4958.8	4891.7	4749.5	4524.1	4290.6	3963.3	3896.2
57.5°	27402.1	25604.3	17302.1	7304.0	4457.0	4341.6	4322.8	4274.5	4070.6	3745.9	3694.9
60°	27466.5	25293.0	16287.8	5554.5	3931.1	3855.9	3998.2	3936.4	3754.0	3512.5	3440.0
62.5°	27214.3	24627.5	14363.8	4153.8	3493.7	3617.1	3762.0	3668.1	3456.1	3220.0	3174.4
65°	26304.6	23100.7	11575.9	3233.4	3292.4	3504.4	3633.2	3520.5	3262.9	2994.6	2965.1
67.5°	24525.6	20723.3	7620.6	2908.7	3198.5	3410.5	3555.4	3375.6	3115.3	2825.5	2790.7
70°	21190.2	16381.7	3630.5	2712.8	3018.7	3228.0	3343.4	3139.5	2887.3	2602.8	2565.3
72.5°	16365.6	11133.1	2004.4	2498.2	2796.0	2989.2	3072.4	2830.9	2597.5	2479.4	2468.7
75°	9850.5	4784.4	1811.2	2286.2	2508.9	2688.7	2836.3	2653.8	2449.9	2219.1	2160.1
77.5°	3252.2	1390.0	1703.9	2034.0	2286.2	2503.5	2573.3	2396.2	2141.3	1945.4	1929.3
80°	1140.4	1164.6	1588.5	1693.2	1991.0	2173.5	2251.3	2047.4	1926.6	1722.7	1682.4
82.5°	928.4	1043.8	1282.6	1277.3	1572.4	1787.1	1905.2	1854.2	1695.9	1532.2	1516.1
85°	759.4	955.3	813.0	893.5	1127.0	1360.4	1585.8	1591.2	1470.5	1304.1	1194.1
87.5°	450.8	488.4	405.2	456.2	595.7	764.7	885.5	845.2	692.3	585.0	571.5
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)