

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: STREETWORKS

Report Number: P510871

Luminaire Tested: **CST-CA8-480-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-760-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 69893 lumens
Efficiency: N/A
Efficacy: 145.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

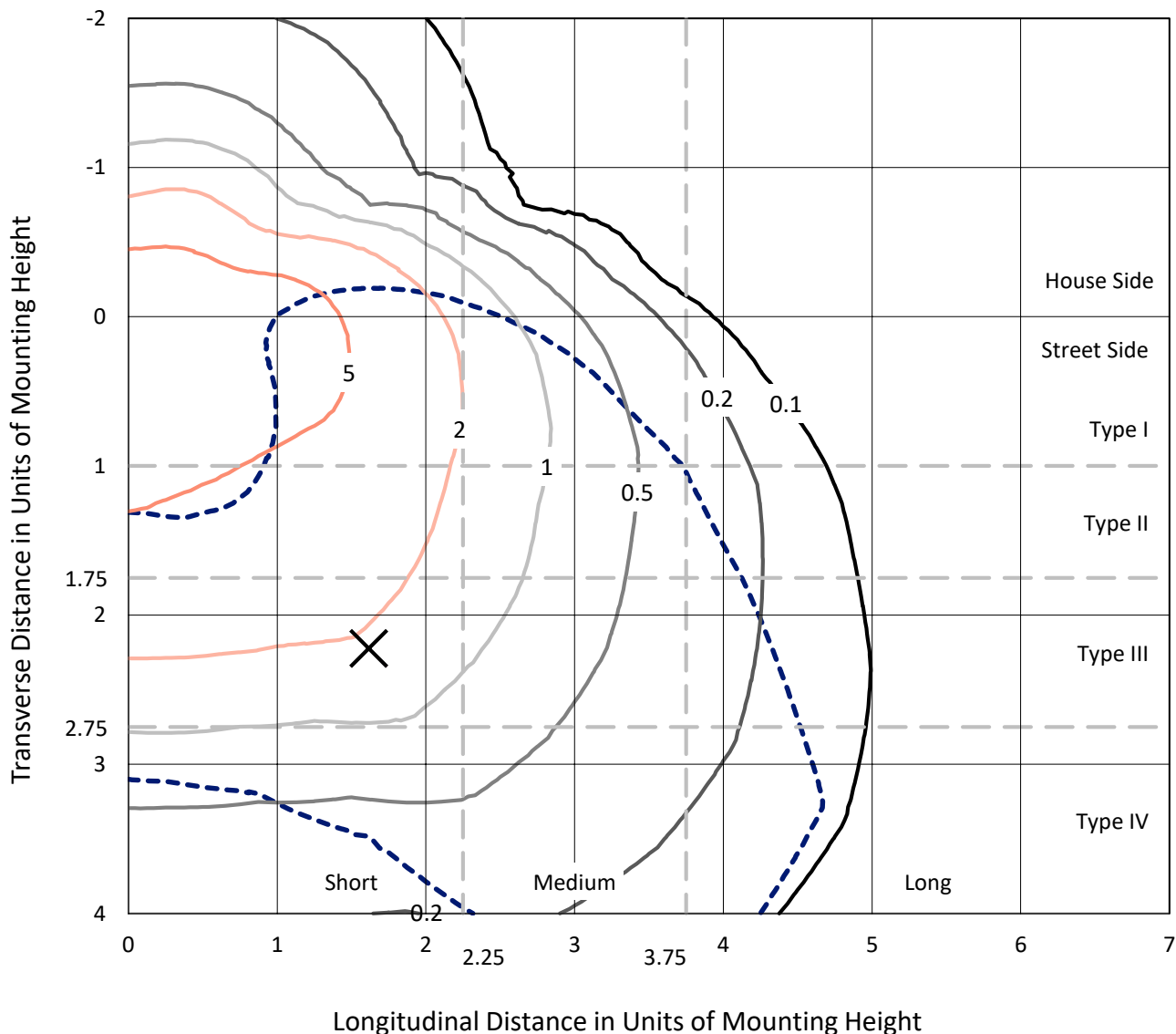
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

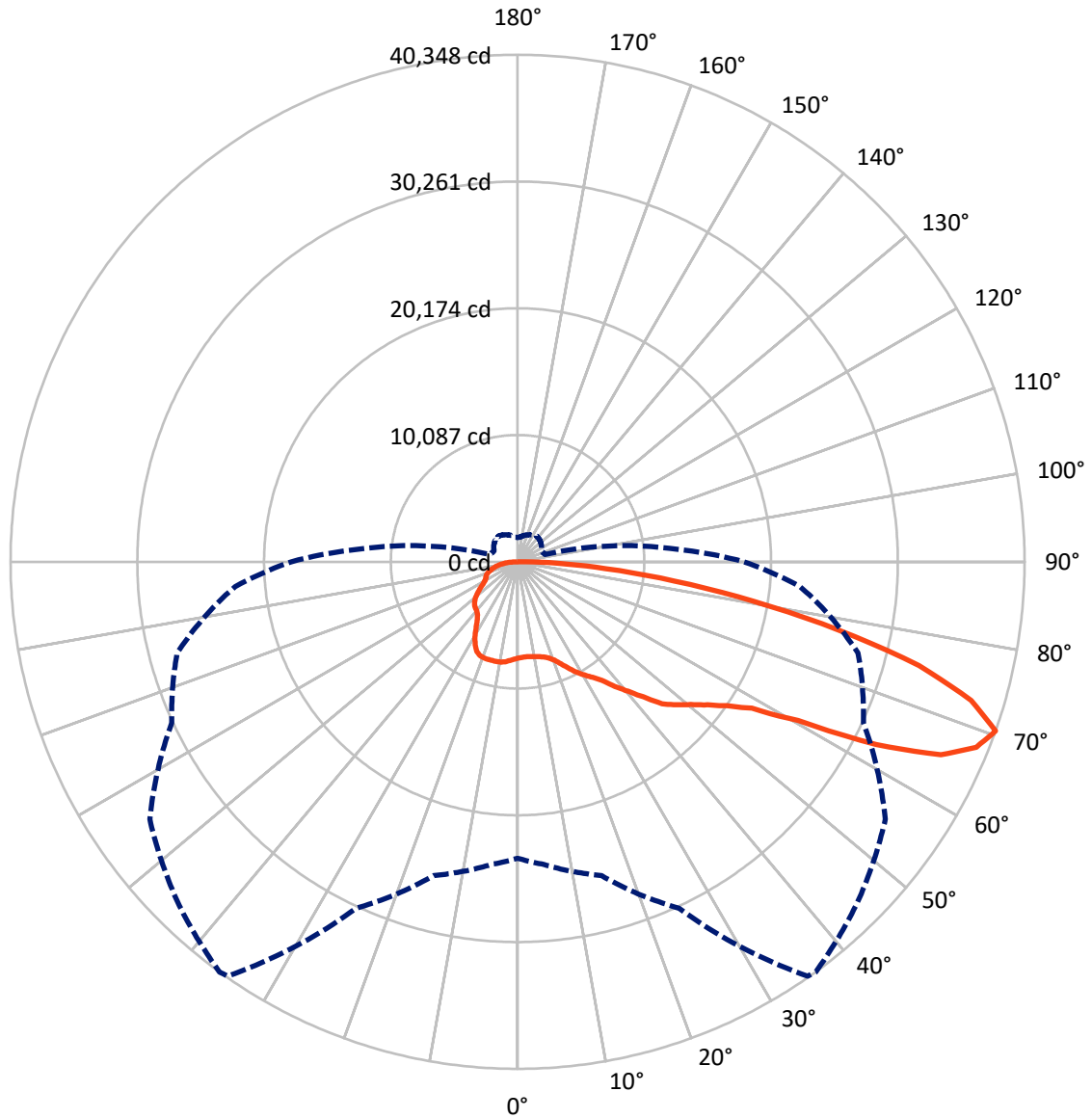
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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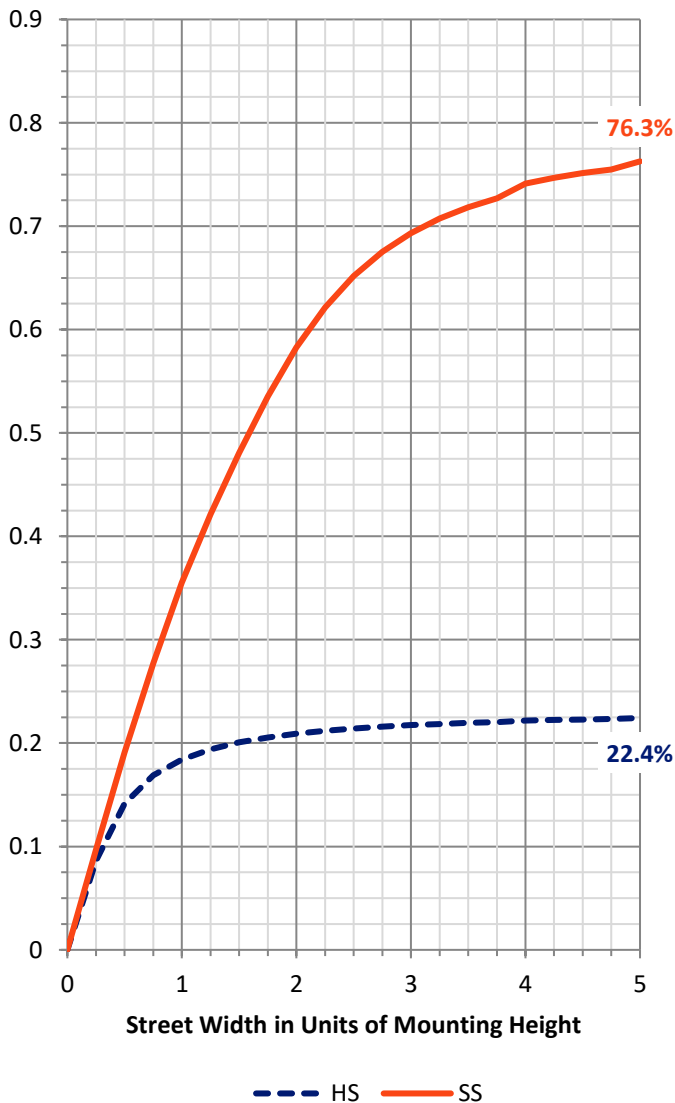
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15924.7	0.0	15924.7
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	53968.3	0.0	53968.3
	% Fixture	77.2	0.0	77.2
Total	Lumens	69893.0	0.0	69893.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	741.7	1.1
10°-20°	2292.8	3.3
20°-30°	4135.8	5.9
30°-40°	6405.6	9.2
40°-50°	9730.2	13.9
50°-60°	13486.6	19.3
60°-70°	17537.2	25.1
70°-80°	12951.1	18.5
80°-90°	2611.9	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°	69893.0	100.0
0°-180°	69893.0	100.0

Coefficient of Utilization



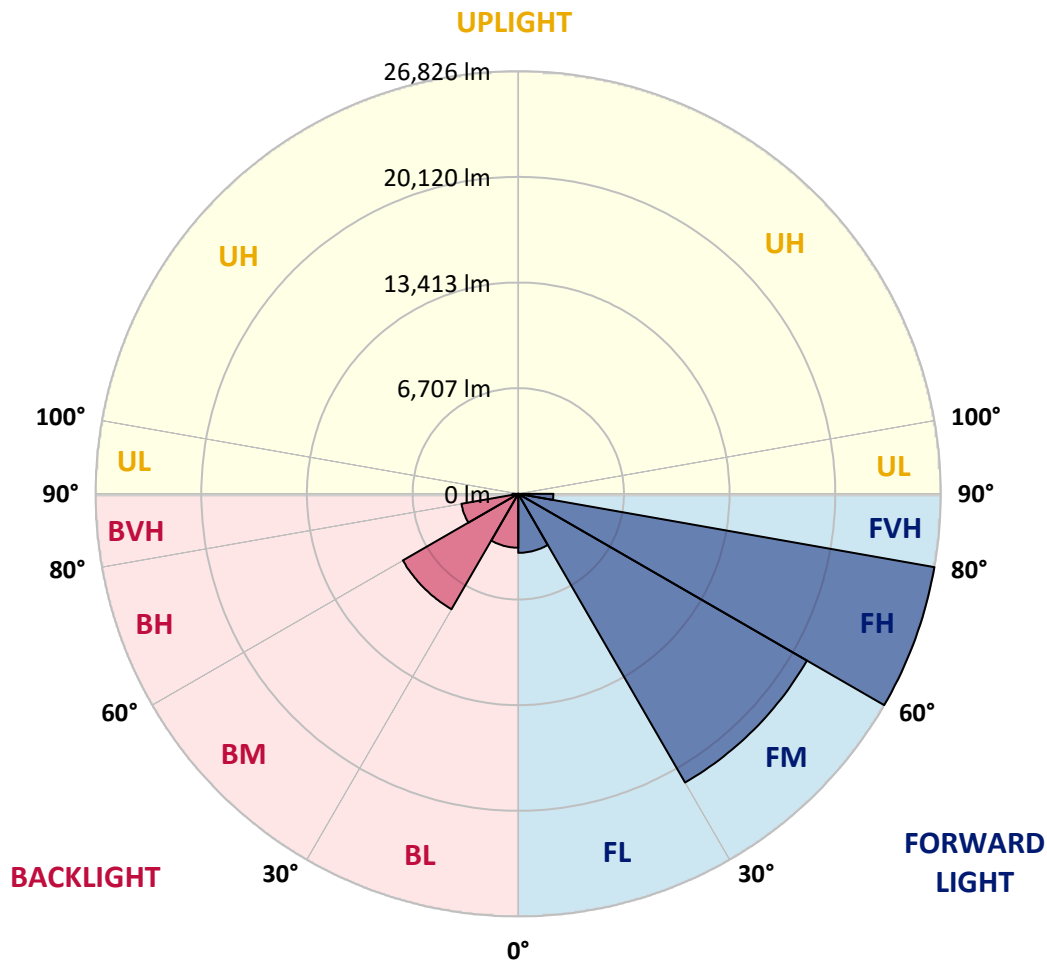
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3747.0	5.4			
FM (30°-60°)	21163.4	30.3			
FH (60°-80°)	26826.5	38.4			G5
FVH (80°-90°)	2231.4	3.2			G5
BL (0°-30°)	3423.4	4.9	B4/5000		
BM (30°-60°)	8459.0	12.1	B4/8500		
BH (60°-80°)	3661.8	5.2	B4/5000		G4/5000
BVH (80°-90°)	380.5	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4
2.5°	7609.1	7598.9	7593.1	7604.7	7609.1	7610.5	7613.4	7610.5	7603.3	7629.3	7661.2
5°	7610.5	7604.7	7593.1	7583.0	7583.0	7583.0	7584.5	7617.7	7632.2	7629.3	7668.4
7.5°	7622.1	7617.7	7596.0	7588.8	7606.2	7612.0	7640.9	7630.8	7646.7	7672.7	7706.0
10°	7623.5	7617.7	7598.9	7614.8	7664.1	7672.7	7685.8	7714.7	7720.5	7752.3	7785.6
12.5°	7638.0	7638.0	7645.2	7680.0	7732.1	7742.2	7791.4	7814.6	7849.3	7865.2	7905.7
15°	7714.7	7713.3	7730.6	7769.7	7853.6	7859.4	7920.2	7989.7	8015.7	8054.8	8119.9
17.5°	7897.0	7905.7	7907.2	7936.1	8036.0	8038.9	8138.7	8203.8	8263.2	8332.6	8481.7
20°	8329.7	8313.8	8296.5	8296.5	8335.5	8355.8	8432.5	8536.7	8658.2	8781.2	8956.3
22.5°	8873.9	8905.7	8842.0	8808.7	8827.6	8804.4	8862.3	8946.2	9088.0	9271.8	9493.2
25°	9523.6	9526.5	9522.2	9387.6	9345.6	9360.1	9407.9	9486.0	9674.1	9820.3	10141.6
27.5°	10157.5	10144.4	10098.1	9956.3	9915.8	9936.1	9934.6	10150.2	10342.7	10529.4	10907.1
30°	10733.4	10768.2	10685.7	10446.9	10451.2	10448.3	10514.9	10792.8	11144.4	11491.7	11879.6
32.5°	11749.3	11643.7	11532.3	11060.5	10973.7	10963.5	11002.6	11416.5	11937.5	12523.5	12989.5
35°	12705.9	12679.8	12569.9	12090.8	11588.7	11580.0	11526.5	12030.1	12762.3	13847.7	14429.4
37.5°	13684.1	13646.5	13538.0	13129.9	12630.6	12582.9	12132.8	12684.2	13674.0	15396.1	16225.3
40°	14850.5	14827.4	14659.5	14137.1	13624.8	13552.5	13085.0	13371.6	14824.5	17458.3	18042.9
42.5°	15873.7	15869.3	15676.9	15192.1	14756.5	14684.1	14286.2	14584.3	16423.6	19478.5	19822.9
45°	16624.7	16739.1	16747.7	16471.3	16170.3	16106.7	16001.0	16412.0	18273.0	21312.0	21261.4
47.5°	17258.6	17357.0	17254.2	17112.4	17009.7	17014.0	17177.5	17993.7	20099.3	22909.7	22516.0
50°	18317.9	18257.1	17723.1	17639.2	17769.4	17846.1	18320.8	19701.4	22190.4	24408.9	23641.9
52.5°	19846.1	19613.1	18565.4	18394.6	18888.1	18917.0	19672.4	21228.1	24280.1	25695.4	24672.3
55°	21937.2	21744.7	20561.0	19772.3	20021.2	20216.5	21280.2	22792.4	25986.3	26905.2	25465.3
57.5°	25028.3	25042.7	24077.5	22607.2	21760.6	21969.0	22799.7	24313.4	27395.8	27918.2	25960.2
60°	27505.8	27964.5	27676.5	27005.1	25789.5	25647.7	25015.3	25898.0	28599.8	28779.3	26433.4
62.5°	29223.5	29431.9	30421.8	30563.6	31952.8	32012.2	28983.3	27754.7	29922.5	29343.6	26533.3
65°	29136.7	29265.5	30829.9	32734.3	36838.4	37022.2	35249.4	30563.6	30828.4	29595.4	26242.4
67.5°	27107.8	27301.7	29290.1	32850.1	39441.8	39372.3	38247.9	34473.8	31126.5	29191.7	24856.1
70°	23584.0	24181.7	25851.7	30408.7	40255.1	40347.7	38275.4	35722.6	30358.1	28049.9	22545.0
72.5°	19438.0	19626.1	21203.5	26303.2	37877.4	37741.4	36706.7	34074.3	28968.8	25984.8	18500.2
75°	14782.5	14782.5	16692.8	20961.8	32527.4	33004.9	33407.2	30861.7	25663.6	21178.9	12597.3
77.5°	9813.1	10164.7	11703.0	15752.1	25747.5	26100.6	27489.9	26306.1	21012.5	15530.7	5753.8
80°	5205.4	5248.8	6898.5	10467.2	18416.3	19082.0	20992.2	20288.9	15113.9	7276.2	1454.4
82.5°	1820.5	1986.9	3033.2	6066.4	12134.3	12549.6	13925.8	12056.1	5338.5	1610.7	804.6
85°	904.5	936.3	1335.7	2888.5	6831.9	7033.1	8135.8	4696.0	859.6	703.3	547.0
87.5°	435.6	445.7	512.3	1033.3	2969.5	3107.0	3289.3	1528.2	318.4	267.7	237.3
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°	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4	7655.4
2.5°	7668.4	7681.4	7706.0	7713.3	7695.9	7727.7	7758.1	7785.6	7784.2	7794.3	7830.5
5°	7685.8	7713.3	7739.3	7785.6	7830.5	7856.5	7881.1	7904.3	7911.5	7933.2	7954.9
7.5°	7739.3	7766.8	7826.1	7907.2	7910.1	7975.2	8017.2	8024.4	8030.2	8030.2	8080.8
10°	7821.8	7872.4	7967.9	8024.4	8075.0	8053.3	8096.7	8069.2	8049.0	8057.7	8092.4
12.5°	7963.6	8008.5	8145.9	8208.2	8161.9	8153.2	8109.8	8047.5	7976.6	7969.4	8001.2
15°	8186.5	8270.4	8393.4	8452.7	8337.0	8234.2	8088.1	7960.7	7823.2	7772.6	7792.8
17.5°	8545.4	8646.7	8781.2	8740.7	8529.4	8326.8	8085.2	7816.0	7549.7	7364.5	7412.2
20°	9070.7	9145.9	9255.9	9092.4	8784.1	8449.8	8053.3	7627.9	7177.8	6840.6	6801.6
22.5°	9622.0	9736.4	9669.8	9367.3	8963.6	8497.6	7986.8	7354.4	6658.3	6235.7	6172.0
25°	10286.3	10323.9	10093.8	9637.9	9014.2	8422.4	7771.1	6955.0	6127.2	5729.2	5710.4
27.5°	10991.0	10905.6	10477.3	9762.4	8957.8	8199.5	7338.4	6324.0	5646.7	5295.1	5240.1
30°	11787.0	11588.7	10794.2	9775.4	8745.1	7765.3	6791.4	5830.5	5256.0	4902.9	4846.5
32.5°	12811.5	12344.1	11088.0	9640.8	8296.5	7128.6	6134.4	5409.4	4904.4	4549.8	4499.2
35°	14121.2	13332.5	11399.1	9397.7	7743.6	6491.9	5590.3	5052.0	4619.3	4192.4	4124.3
37.5°	15630.6	14711.6	11771.0	9090.9	7137.3	5931.8	5222.7	4824.8	4408.0	3924.6	3843.6
40°	17384.5	16092.2	12344.1	8724.8	6593.2	5528.1	5044.7	4746.6	4290.8	3787.2	3694.5
42.5°	18904.0	17552.4	13025.7	8331.2	6079.4	5192.3	4965.1	4694.5	4217.0	3684.4	3578.8
45°	20309.2	18757.8	13691.4	7853.6	5538.2	4962.2	4869.6	4564.3	4086.7	3557.1	3447.1
47.5°	21450.9	19731.7	14270.2	7415.1	5105.5	4751.0	4661.2	4316.8	3868.2	3403.7	3322.6
50°	22327.9	20464.0	14587.2	7066.4	4648.2	4510.7	4392.1	4037.5	3606.3	3205.4	3136.0
52.5°	23225.1	21197.7	14743.5	7083.7	4222.8	4153.3	4031.7	3727.8	3397.9	3089.6	3014.4
55°	23747.6	21498.7	14578.5	6662.6	3832.0	3751.0	3645.3	3487.6	3290.8	3017.3	2946.4
57.5°	24052.9	21685.4	14076.3	5434.0	3361.7	3285.0	3302.4	3289.3	3127.3	2839.3	2774.2
60°	24272.9	21280.2	13047.4	3994.1	2960.8	2903.0	3046.2	2999.9	2859.5	2635.2	2580.2
62.5°	24094.9	20508.9	11195.1	3002.8	2633.8	2756.8	2882.7	2797.3	2606.3	2402.3	2338.6
65°	23009.5	18995.2	8509.2	2412.4	2528.2	2697.5	2798.8	2661.3	2467.4	2225.7	2196.8
67.5°	21034.2	16251.4	5018.7	2211.2	2448.6	2628.0	2711.9	2529.6	2358.8	2127.3	2092.6
70°	18019.8	12166.1	2241.6	2059.3	2309.6	2487.6	2542.6	2370.4	2185.2	1968.1	1933.4
72.5°	13412.1	7335.5	1510.8	1901.5	2104.1	2261.9	2322.7	2140.3	2008.6	1910.2	1900.1
75°	7448.4	2547.0	1393.6	1722.1	1879.8	2021.7	2096.9	1968.1	1863.9	1729.3	1674.3
77.5°	2371.9	1082.5	1324.1	1539.8	1739.5	1856.7	1845.1	1651.2	1617.9	1454.4	1439.9
80°	946.4	943.5	1224.3	1260.5	1484.8	1583.2	1557.1	1312.6	1356.0	1260.5	1222.8
82.5°	742.4	863.9	981.2	962.3	1154.8	1270.6	1234.4	963.8	1089.7	1001.4	916.0
85°	564.4	756.9	629.5	626.6	806.1	943.5	966.7	740.9	742.4	675.8	602.0
87.5°	290.9	279.3	241.7	240.2	269.2	383.5	470.3	421.1	332.8	250.4	240.2
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)