

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: P510788

Luminaire Tested: **CST-CA8-330-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-740-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45651 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

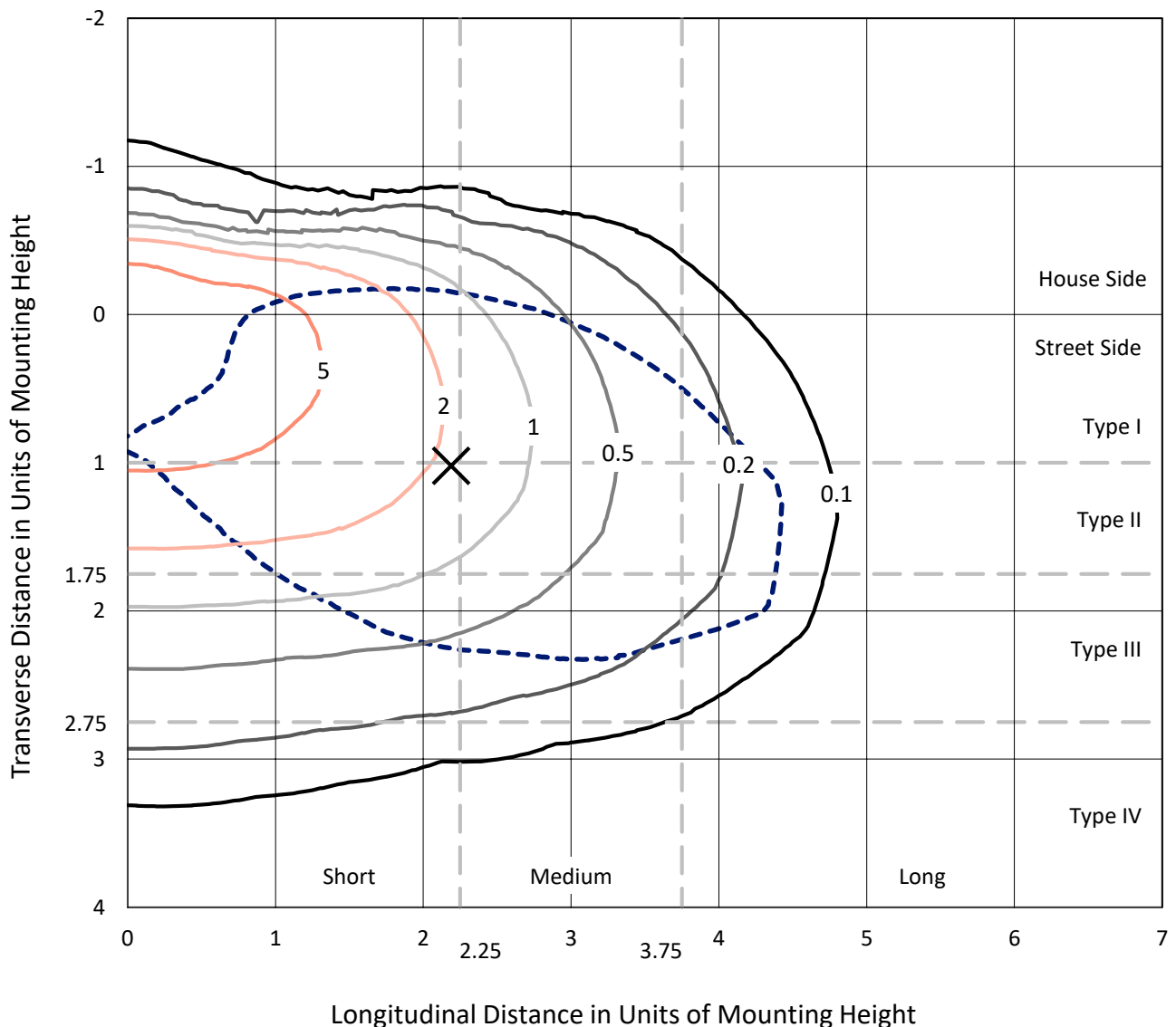
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

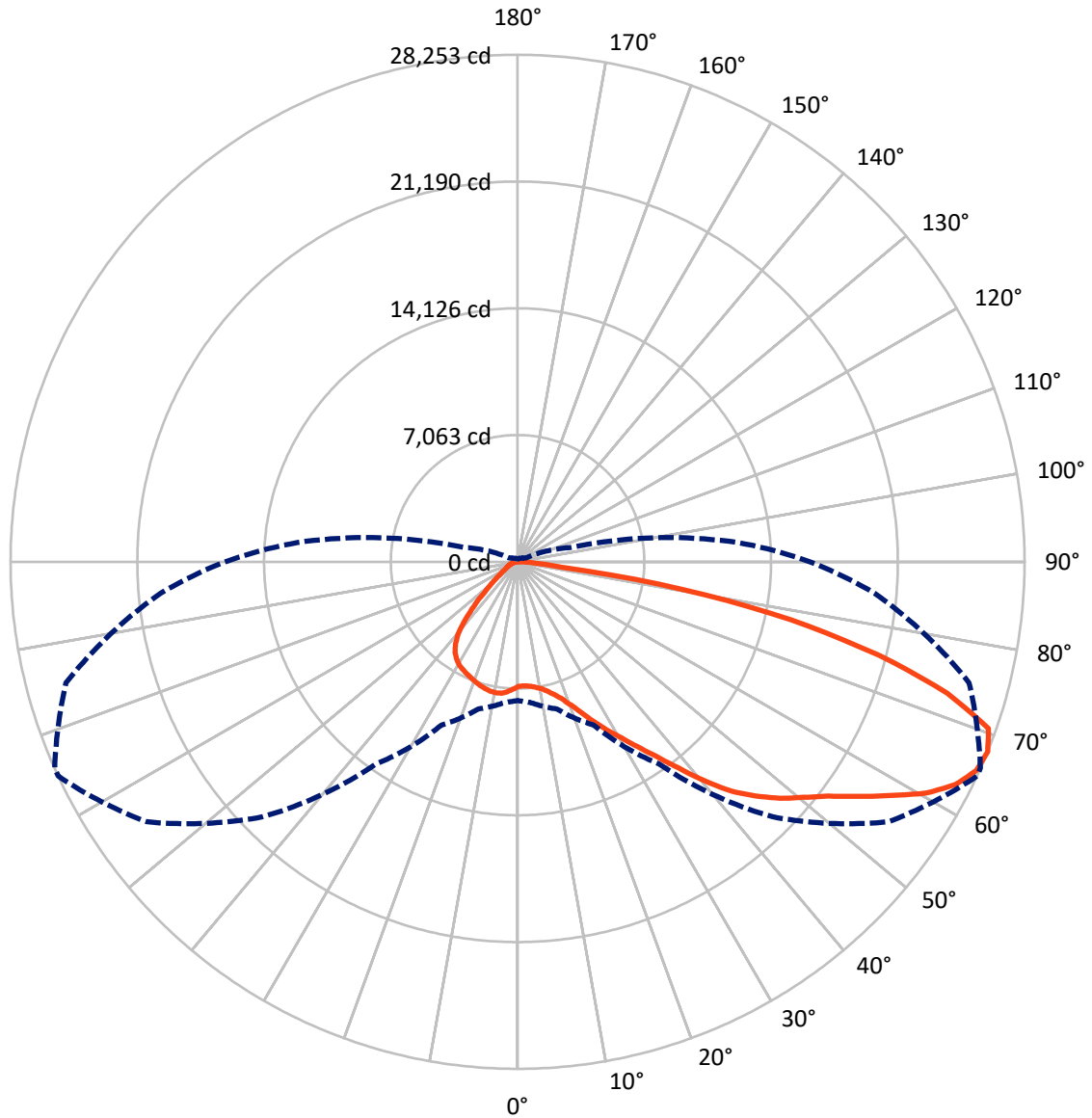
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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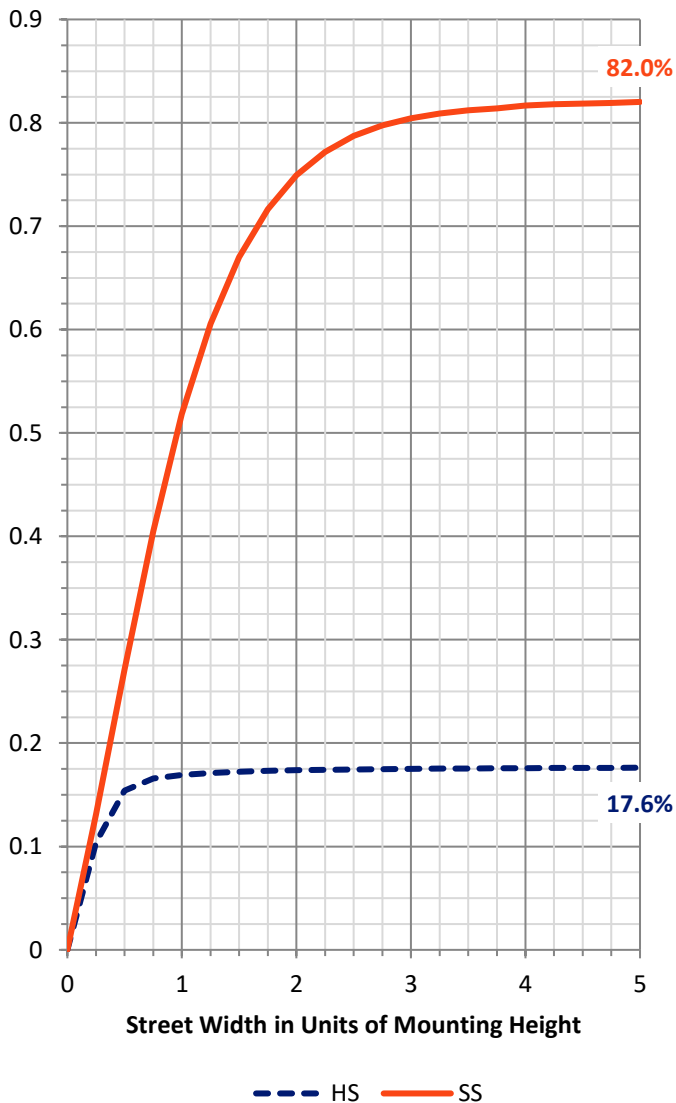
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8159.0	0.0	8159.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	37492.0	0.0	37492.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	45651.0	0.0	45651.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	686.3	1.5
10°-20°	2118.9	4.6
20°-30°	3675.8	8.1
30°-40°	5544.8	12.1
40°-50°	7688.3	16.8
50°-60°	9490.2	20.8
60°-70°	10111.7	22.1
70°-80°	5786.1	12.7
80°-90°	549.0	1.2
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°	45651.0	100.0
0°-180°	45651.0	100.0

Coefficient of Utilization

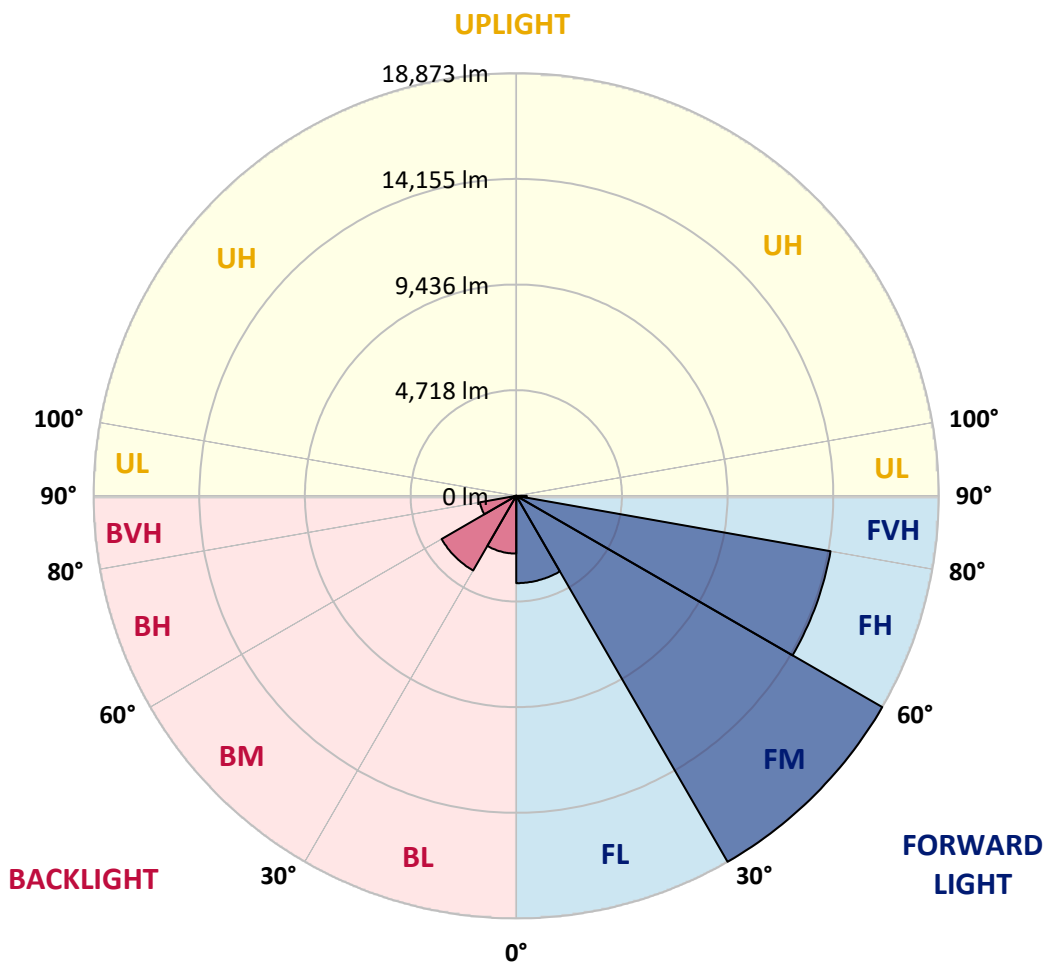


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3899.2	8.5			
FM (30°-60°)	18872.8	41.3			
FH (60°-80°)	14251.0	31.2			G5
FVH (80°-90°)	469.1	1.0			G3/500
BL (0°-30°)	2581.7	5.7	B4/5000		
BM (30°-60°)	3850.6	8.4	B3/5000		
BH (60°-80°)	1646.7	3.6	B3/2500		G3/2500
BVH (80°-90°)	79.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0
2.5°	6870.0	6861.0	6853.0	6867.0	6875.0	6888.0	6907.0	6920.0	6924.0	6936.0	6951.0
5°	6980.0	6979.0	6968.0	6962.0	6945.0	6939.0	6943.0	6959.0	6960.0	6975.0	7022.0
7.5°	7196.0	7194.0	7167.0	7155.0	7119.0	7079.0	7049.0	7052.0	7051.0	7066.0	7129.0
10°	7522.0	7506.0	7468.0	7431.0	7361.0	7286.0	7231.0	7181.0	7181.0	7203.0	7273.0
12.5°	7890.0	7912.0	7860.0	7804.0	7687.0	7552.0	7456.0	7400.0	7394.0	7405.0	7455.0
15°	8347.0	8347.0	8312.0	8232.0	8129.0	7941.0	7743.0	7672.0	7662.0	7685.0	7682.0
17.5°	8862.0	8877.0	8811.0	8771.0	8613.0	8405.0	8157.0	8034.0	8034.0	8019.0	7950.0
20°	9519.0	9437.0	9444.0	9378.0	9262.0	8960.0	8708.0	8529.0	8527.0	8497.0	8303.0
22.5°	10233.0	10188.0	10149.0	10091.0	9931.0	9661.0	9311.0	9134.0	9130.0	9056.0	8768.0
25°	10936.9	10970.9	10927.9	10821.9	10704.9	10411.0	10025.0	9851.0	9850.0	9727.0	9319.0
27.5°	11660.9	11697.9	11683.9	11587.9	11431.9	11201.9	10836.9	10610.0	10596.0	10516.0	10003.0
30°	12460.9	12427.9	12470.9	12429.9	12351.9	11976.9	11646.9	11382.9	11416.9	11392.9	10779.9
32.5°	13042.9	13063.9	13204.9	13208.9	13126.9	12848.9	12445.9	12283.9	12337.9	12305.9	11734.9
35°	13568.9	13602.9	13784.9	13963.9	14023.9	13719.9	13309.9	13299.9	13369.9	13564.9	13050.9
37.5°	14020.9	14044.9	14299.9	14532.9	14726.9	14518.9	14220.9	14575.9	14678.9	15077.9	14408.9
40°	14291.9	14322.9	14652.9	14980.9	15326.9	15252.9	15224.9	16064.9	16161.9	16512.9	15399.9
42.5°	14138.9	14199.9	14749.9	15349.9	15858.9	16006.9	16389.9	17469.9	17580.9	17610.9	16373.9
45°	13865.9	13941.9	14556.9	15527.9	16357.9	16832.9	17561.9	18614.9	18675.9	18590.9	17180.9
47.5°	13571.9	13652.9	14339.9	15474.9	16758.9	17793.9	18608.9	19692.9	19735.9	19474.9	17993.9
50°	13237.9	13312.9	14051.9	15350.9	17060.9	18700.9	19684.9	20624.9	20785.9	20269.9	18625.9
52.5°	12831.9	12911.9	13695.9	15156.9	17325.9	19373.9	20633.9	21677.9	21688.9	21263.9	19337.9
55°	12305.9	12444.9	13248.9	14820.9	17464.9	19951.9	21460.9	23070.9	23141.9	22730.9	19933.9
57.5°	11720.9	11841.9	12710.9	14372.9	17339.9	20390.9	22790.9	24564.9	24555.9	23730.9	20454.9
60°	10947.9	11033.9	12009.9	13786.9	16936.9	20921.9	24175.9	26165.9	26149.9	24710.9	20789.9
62.5°	9956.0	10042.0	10959.9	12867.9	16344.9	21277.9	25115.9	27364.9	27318.9	25423.9	20892.9
65°	8806.0	8960.0	9757.0	11674.9	15297.9	21043.9	25569.9	28070.9	27996.9	25967.9	20646.9
67.5°	7728.0	7859.0	8490.0	10033.0	13752.9	20094.9	25249.9	28252.9	28230.9	26046.9	19951.9
70°	6202.0	6250.0	6828.0	8149.0	11442.9	18062.9	24143.9	27832.9	27842.9	25318.9	18555.9
72.5°	4245.0	4362.0	4619.0	5662.0	8327.0	14364.9	20809.9	25048.9	25050.9	22702.9	16166.9
75°	2283.0	2464.0	2764.0	3281.0	4655.0	9218.0	16711.9	20784.9	20823.9	18928.9	12849.9
77.5°	1132.0	1197.0	1371.0	1755.0	2134.0	4349.0	10747.9	15601.9	15694.9	14529.9	8764.0
80°	518.0	529.0	542.0	539.0	817.0	1908.0	4614.0	9370.0	9398.0	8642.0	4001.0
82.5°	405.0	403.0	409.0	372.0	374.0	736.0	1597.0	2454.0	2617.0	2060.0	1269.0
85°	245.0	244.0	263.0	204.0	251.0	398.0	806.0	979.0	991.0	806.0	657.0
87.5°	93.0	90.0	83.0	73.0	84.0	112.0	279.0	360.0	352.0	250.0	227.0
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°	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0	6937.0
2.5°	6964.0	6996.0	7055.0	7100.0	7115.0	7163.0	7209.0	7217.0	7250.0	7263.0	7306.0
5°	7051.0	7105.0	7197.0	7258.0	7285.0	7365.0	7417.0	7443.0	7434.0	7439.0	7487.0
7.5°	7178.0	7229.0	7303.0	7377.0	7390.0	7404.0	7399.0	7395.0	7360.0	7330.0	7375.0
10°	7294.0	7342.0	7388.0	7399.0	7333.0	7296.0	7230.0	7179.0	7111.0	7080.0	7116.0
12.5°	7457.0	7467.0	7422.0	7362.0	7220.0	7088.0	6981.0	6888.0	6804.0	6746.0	6794.0
15°	7629.0	7590.0	7459.0	7284.0	7064.0	6875.0	6700.0	6545.0	6406.0	6372.0	6385.0
17.5°	7857.0	7751.0	7487.0	7193.0	6851.0	6557.0	6332.0	6136.0	5954.0	5878.0	5871.0
20°	8135.0	7964.0	7544.0	7078.0	6599.0	6208.0	5860.0	5567.0	5316.0	5110.0	5115.0
22.5°	8497.0	8249.0	7630.0	6958.0	6320.0	5799.0	5293.0	4795.0	4382.0	4204.0	4160.0
25°	8975.0	8605.0	7752.0	6849.0	6008.0	5279.0	4564.0	3861.0	3424.0	3251.0	3232.0
27.5°	9570.0	9083.0	7938.0	6728.0	5674.0	4662.0	3634.0	2945.0	2544.0	2362.0	2301.0
30°	10246.0	9672.0	8129.0	6602.0	5270.0	3869.0	2771.0	2096.0	1685.0	1522.0	1501.0
32.5°	11120.9	10418.0	8413.0	6404.0	4680.0	3041.0	1933.0	1308.0	1029.0	959.0	939.0
35°	12363.9	11426.9	8764.0	6154.0	3922.0	2124.0	1198.0	766.0	617.0	582.0	575.0
37.5°	13522.9	12416.9	9118.0	5739.0	2978.0	1326.0	685.0	491.0	458.0	459.0	461.0
40°	14441.9	13093.9	9404.0	5193.0	1959.0	753.0	476.0	408.0	409.0	406.0	404.0
42.5°	15259.9	13633.9	9533.0	4386.0	1135.0	504.0	413.0	376.0	367.0	370.0	368.0
45°	15936.9	14184.9	9283.0	3479.0	669.0	452.0	390.0	349.0	339.0	355.0	357.0
47.5°	16648.9	14707.9	8900.0	2621.0	543.0	430.0	369.0	329.0	324.0	344.0	346.0
50°	17247.9	15086.9	8247.0	1975.0	518.0	406.0	350.0	309.0	308.0	326.0	326.0
52.5°	17748.9	15315.9	7472.0	1525.0	501.0	385.0	331.0	290.0	290.0	296.0	297.0
55°	18101.9	15269.9	7010.0	1200.0	483.0	365.0	311.0	272.0	260.0	256.0	258.0
57.5°	18165.9	15147.9	6474.0	936.0	462.0	346.0	293.0	251.0	229.0	226.0	225.0
60°	18124.9	14879.9	5862.0	782.0	438.0	328.0	275.0	229.0	207.0	200.0	202.0
62.5°	17953.9	14404.9	5155.0	686.0	414.0	314.0	255.0	214.0	194.0	185.0	185.0
65°	17437.9	13724.9	4105.0	601.0	384.0	299.0	239.0	208.0	186.0	176.0	174.0
67.5°	16303.9	12313.9	3085.0	527.0	355.0	283.0	237.0	207.0	182.0	168.0	166.0
70°	14782.9	10578.0	2106.0	463.0	323.0	268.0	236.0	208.0	178.0	160.0	158.0
72.5°	12340.9	8339.0	1213.0	403.0	291.0	254.0	232.0	209.0	171.0	149.0	146.0
75°	9273.0	5849.0	712.0	346.0	260.0	233.0	221.0	203.0	160.0	136.0	133.0
77.5°	5577.0	2731.0	536.0	287.0	223.0	205.0	197.0	186.0	146.0	126.0	123.0
80°	2046.0	1037.0	421.0	230.0	177.0	178.0	170.0	163.0	133.0	116.0	114.0
82.5°	892.0	634.0	311.0	175.0	139.0	159.0	140.0	134.0	114.0	104.0	100.0
85°	541.0	378.0	200.0	119.0	96.0	108.0	98.0	103.0	88.0	82.0	79.0
87.5°	179.0	113.0	89.0	58.0	48.0	45.0	44.0	53.0	50.0	46.0	46.0
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)