

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: P510786

Luminaire Tested: **CST-CA8-330-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510786
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
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-T2-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: 44550 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

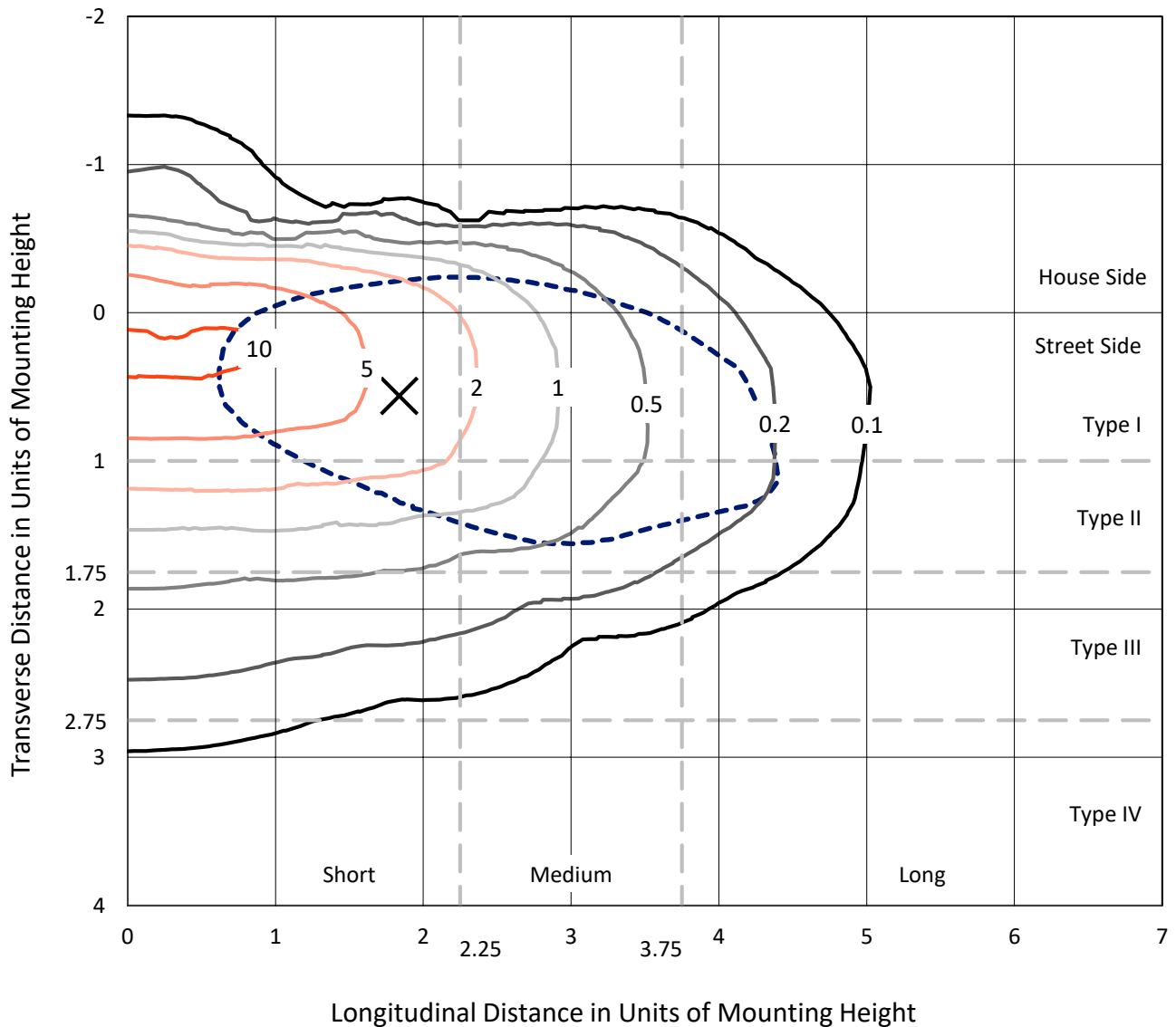
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

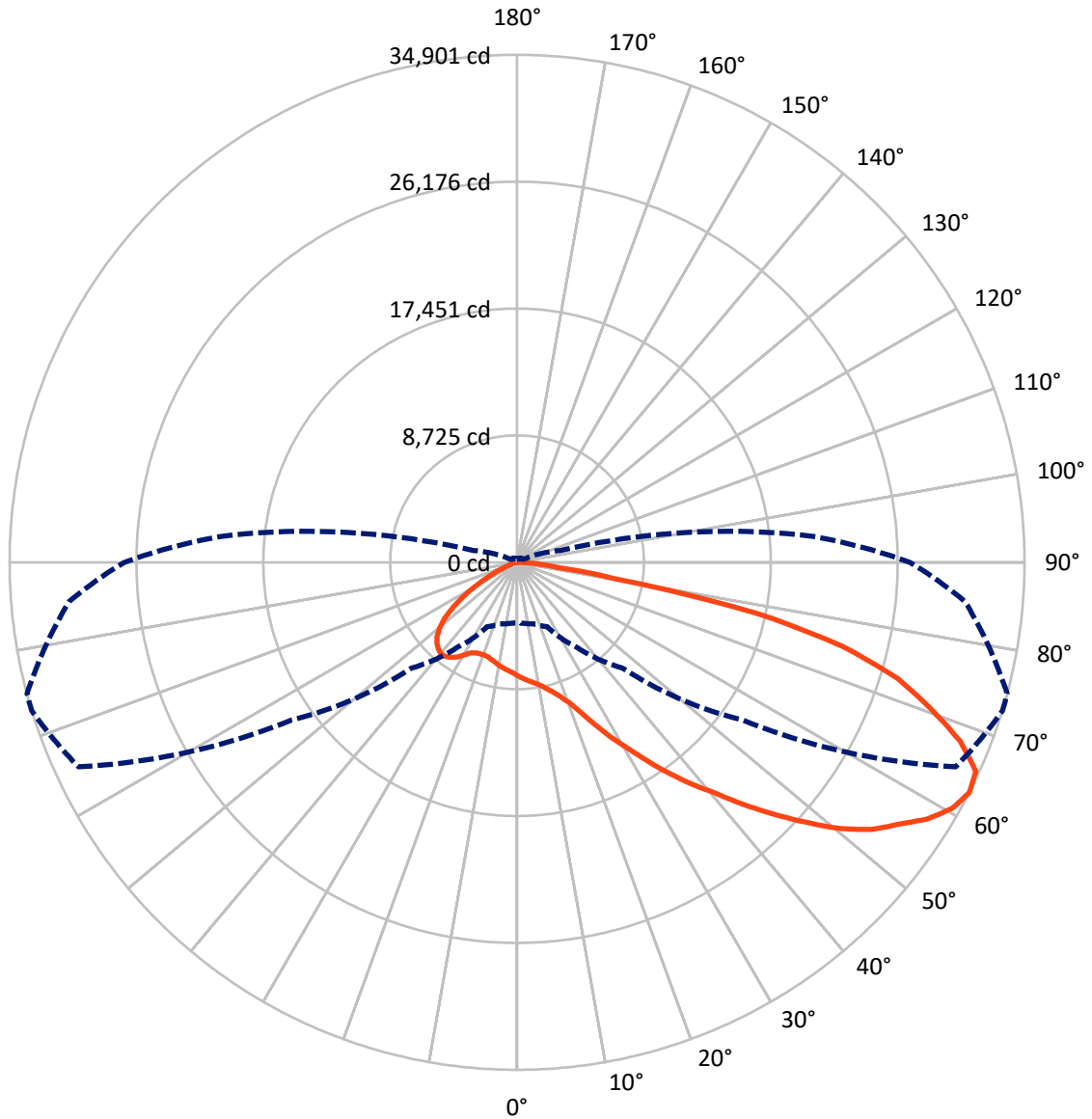
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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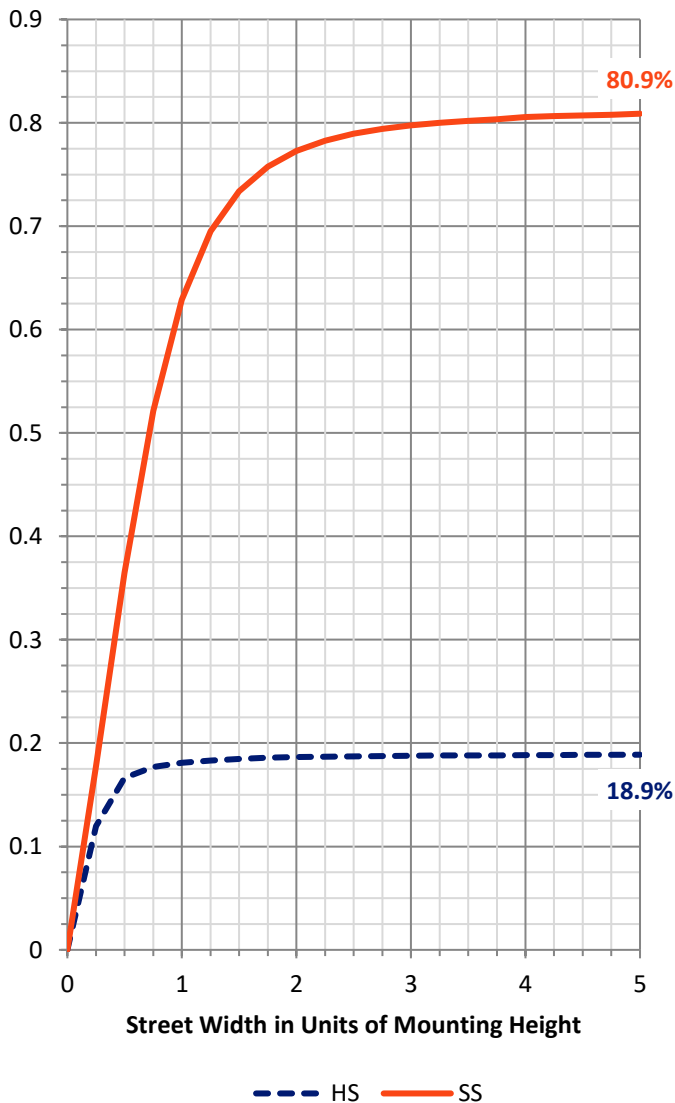
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8522.2	0.0	8522.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	36027.8	0.0	36027.8
	% Fixture	80.9	0.0	80.9
Total	Lumens	44550.0	0.0	44550.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	746.2	1.7
10°-20°	2244.5	5.0
20°-30°	3878.1	8.7
30°-40°	5831.7	13.1
40°-50°	7776.0	17.5
50°-60°	9157.8	20.6
60°-70°	9104.5	20.4
70°-80°	5227.1	11.7
80°-90°	583.9	1.3
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°	44550.0	100.0
0°-180°	44550.0	100.0

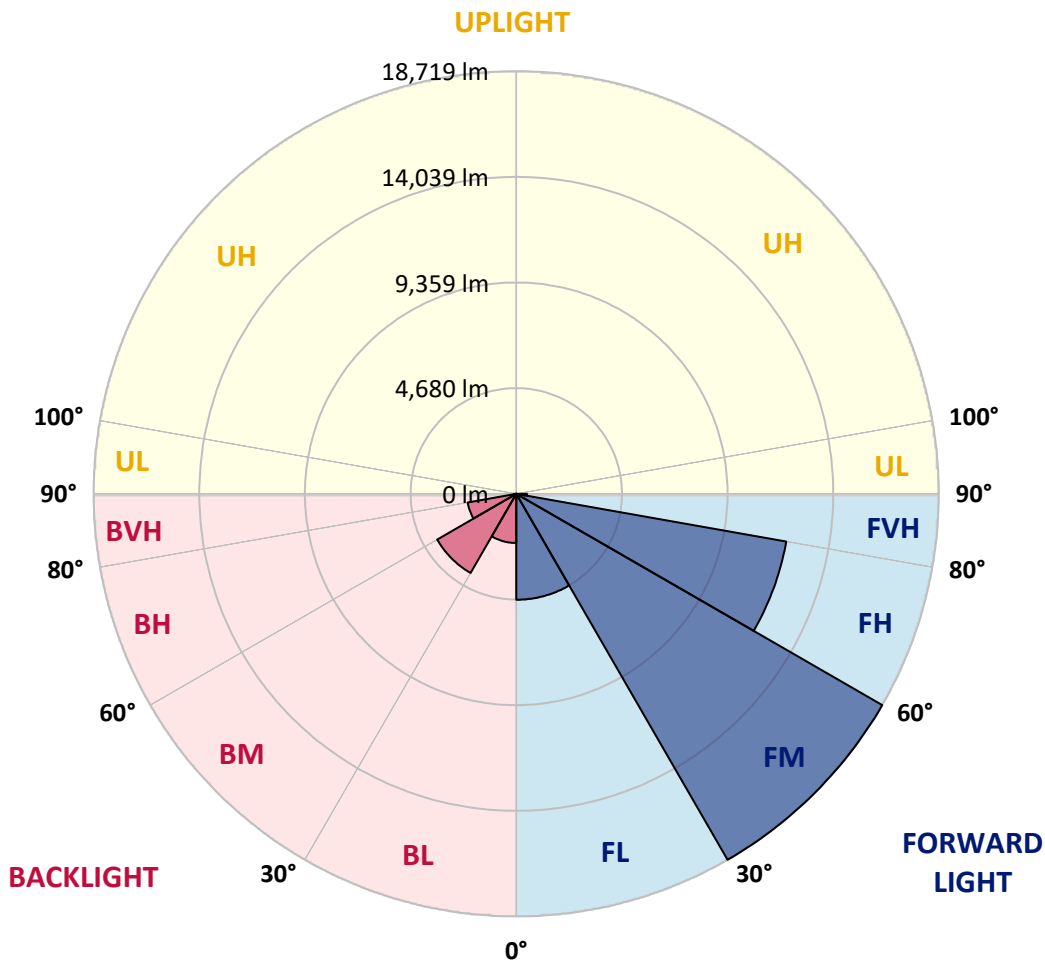


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4691.1	10.5			
FM (30°-60°)	18718.8	42.0			
FH (60°-80°)	12143.6	27.3			G5
FVH (80°-90°)	474.3	1.1			G3/500
BL (0°-30°)	2177.8	4.9	B3/2500		
BM (30°-60°)	4046.7	9.1	B3/5000		
BH (60°-80°)	2188.0	4.9	B3/2500		G3/2500
BVH (80°-90°)	109.7	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1
2.5°	8359.1	8380.1	8355.1	8344.1	8332.1	8254.1	8163.1	8070.1	7995.1	7983.1	7885.1
5°	8946.1	8957.1	8916.1	8869.1	8788.1	8659.1	8496.1	8335.1	8185.1	8145.1	7966.1
7.5°	9397.1	9376.1	9366.1	9326.1	9255.1	9113.1	8866.1	8602.1	8370.1	8314.1	8042.1
10°	9820.1	9811.1	9735.1	9685.1	9572.1	9441.1	9238.1	8903.1	8576.1	8486.1	8108.1
12.5°	10278.1	10258.1	10227.1	10119.1	10027.1	9806.1	9561.1	9256.1	8892.1	8772.1	8221.1
15°	10690.1	10636.1	10619.1	10506.1	10413.1	10244.1	9998.1	9644.1	9255.1	9152.1	8436.1
17.5°	11082.1	11057.1	11019.1	10942.1	10838.1	10708.1	10511.1	10132.1	9730.1	9580.1	8801.1
20°	11415.1	11384.1	11351.1	11372.1	11349.1	11266.1	11142.1	10819.1	10328.1	10183.1	9245.1
22.5°	11647.1	11646.1	11778.1	11855.1	11899.1	11896.1	11866.1	11683.1	11189.1	11042.1	9909.1
25°	11840.1	11855.1	12022.1	12315.1	12577.1	12601.1	12813.1	12726.1	12306.1	12153.1	10908.1
27.5°	11897.1	11927.1	12230.1	12691.1	13089.1	13471.1	13782.1	13941.1	13552.1	13369.1	11982.1
30°	11938.1	11950.1	12247.1	12799.1	13638.1	14243.1	14799.1	15068.1	14733.1	14599.1	13179.1
32.5°	11649.1	11653.1	12108.1	12944.1	14041.1	15090.1	15748.1	16255.1	16167.1	15990.1	14488.1
35°	11251.1	11325.1	11847.1	12804.1	14373.1	15868.1	16764.1	17520.1	17696.1	17569.1	15796.1
37.5°	10759.1	10817.1	11376.1	12596.1	14446.1	16403.1	17554.1	18806.1	19266.1	19245.1	17375.1
40°	10154.1	10225.1	10894.1	12148.1	14410.1	16792.1	18481.1	20230.1	20814.1	20748.1	18941.1
42.5°	9439.1	9543.1	10192.1	11572.1	14147.1	17030.1	19240.1	21680.2	22731.2	22688.2	20327.1
45°	8732.1	8788.1	9380.1	10770.1	13663.1	17107.1	19954.1	23678.2	24697.2	24649.2	21997.2
47.5°	8003.1	8052.1	8670.1	9925.1	12823.1	16952.1	20519.1	25394.2	26700.2	26652.2	23656.2
50°	6307.0	6492.0	7759.1	9182.1	11866.1	16513.1	21052.1	27532.2	28796.2	28592.2	25109.2
52.5°	5396.0	5463.0	6120.0	8433.1	10911.1	15764.1	21408.2	29513.2	30520.2	30226.2	26595.2
55°	5044.0	5089.0	5411.0	7052.1	10014.1	14631.1	21827.2	31499.2	31813.2	31738.2	27807.2
57.5°	4777.0	4827.0	5057.0	5890.0	9069.1	13043.1	21696.2	32896.2	33289.2	33049.2	29094.2
60°	4399.0	4460.0	4765.0	5288.0	7995.1	11431.1	20543.1	33468.2	34362.2	34092.2	30073.2
62.5°	4161.0	4201.0	4376.0	4883.0	7105.1	10297.1	18902.1	33284.2	34901.2	34891.2	30922.2
65°	3838.0	3897.0	4084.0	4495.0	6313.0	9418.1	17354.1	32375.2	34669.2	34678.2	31097.2
67.5°	3500.0	3524.0	3720.0	4050.0	5380.0	8613.1	15351.1	30820.2	32862.2	33068.2	29886.2
70°	3078.0	3066.0	3278.0	3519.0	4397.0	7313.1	12356.1	28054.2	30192.2	30277.2	27437.2
72.5°	2422.0	2433.0	2492.0	2659.0	3338.0	5755.0	8966.1	23702.2	27401.2	27552.2	24307.2
75°	1628.0	1646.0	1921.0	2084.0	2401.0	4136.0	5638.0	15999.1	23164.2	23590.2	19894.1
77.5°	1242.0	1253.0	1333.0	1511.0	1737.0	2948.0	3056.0	8718.1	16864.1	17875.1	15563.1
80°	880.0	884.0	805.0	716.0	925.0	2000.0	1805.0	3713.0	6720.0	7941.1	9141.1
82.5°	394.0	388.0	457.0	380.0	533.0	774.0	852.0	1802.0	2791.0	3000.0	3266.0
85°	183.0	205.0	235.0	197.0	317.0	299.0	332.0	768.0	1308.0	1444.0	1436.0
87.5°	45.0	49.0	62.0	79.0	115.0	102.0	100.0	226.0	292.0	291.0	447.0
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°	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1	7813.1
2.5°	7818.1	7766.1	7643.1	7524.1	7411.1	7336.1	7252.1	7164.1	7111.1	7086.1	7140.1
5°	7857.1	7758.1	7523.1	7287.1	7087.1	6916.0	6796.0	6694.0	6639.0	6644.0	6647.0
7.5°	7890.1	7751.1	7422.1	7089.1	6777.0	6565.0	6408.0	6298.0	6235.0	6187.0	6223.0
10°	7919.1	7722.1	7304.1	6860.0	6521.0	6207.0	5994.0	5861.0	5745.0	5680.0	5731.0
12.5°	7950.1	7711.1	7172.1	6655.0	6216.0	5865.0	5573.0	5441.0	5327.0	5278.0	5309.0
15°	8085.1	7753.1	7049.1	6414.0	5915.0	5461.0	5146.0	4984.0	4894.0	4835.0	4848.0
17.5°	8317.1	7864.1	6970.0	6162.0	5579.0	5099.0	4691.0	4502.0	4353.0	4311.0	4300.0
20°	8647.1	8075.1	6970.0	5949.0	5198.0	4697.0	4227.0	3908.0	3676.0	3589.0	3656.0
22.5°	9201.1	8434.1	7039.1	5756.0	4870.0	4280.0	3720.0	3233.0	2920.0	2793.0	2867.0
25°	9976.1	8989.1	7151.1	5587.0	4571.0	3800.0	3077.0	2517.0	2172.0	2021.0	2019.0
27.5°	10988.1	9838.1	7377.1	5449.0	4213.0	3179.0	2406.0	1867.0	1543.0	1452.0	1465.0
30°	12110.1	10758.1	7804.1	5249.0	3778.0	2484.0	1752.0	1372.0	1144.0	1024.0	1026.0
32.5°	13192.1	11711.1	8311.1	5119.0	3213.0	1873.0	1249.0	979.0	837.0	766.0	777.0
35°	14352.1	12533.1	8688.1	4901.0	2550.0	1354.0	883.0	734.0	675.0	638.0	640.0
37.5°	15605.1	13437.1	8998.1	4609.0	1928.0	930.0	652.0	629.0	604.0	557.0	553.0
40°	16914.1	14484.1	9183.1	4137.0	1340.0	644.0	554.0	580.0	566.0	505.0	500.0
42.5°	18024.1	15292.1	9229.1	3512.0	867.0	522.0	502.0	542.0	545.0	483.0	475.0
45°	19090.1	16012.1	9139.1	2689.0	601.0	491.0	470.0	525.0	529.0	473.0	460.0
47.5°	20283.1	16997.1	8976.1	1794.0	497.0	464.0	459.0	497.0	511.0	465.0	449.0
50°	21732.2	17798.1	8493.1	1102.0	469.0	447.0	447.0	470.0	489.0	449.0	441.0
52.5°	23218.2	18496.1	7778.1	756.0	452.0	429.0	442.0	452.0	459.0	423.0	430.0
55°	24283.2	19115.1	6712.0	608.0	442.0	417.0	448.0	428.0	418.0	387.0	380.0
57.5°	25465.2	19851.1	5622.0	539.0	429.0	424.0	428.0	390.0	362.0	330.0	323.0
60°	26290.2	20247.1	4288.0	507.0	414.0	417.0	395.0	344.0	293.0	270.0	265.0
62.5°	27010.2	20473.1	3143.0	466.0	400.0	399.0	358.0	294.0	241.0	216.0	212.0
65°	26901.2	20120.1	2037.0	433.0	389.0	376.0	321.0	252.0	201.0	182.0	180.0
67.5°	25702.2	18558.1	1283.0	399.0	370.0	347.0	288.0	225.0	185.0	163.0	161.0
70°	23185.2	16401.1	785.0	355.0	329.0	307.0	255.0	211.0	175.0	149.0	144.0
72.5°	19706.1	14047.1	555.0	313.0	287.0	261.0	216.0	201.0	167.0	134.0	130.0
75°	16190.1	10347.1	465.0	273.0	245.0	210.0	184.0	187.0	157.0	122.0	119.0
77.5°	11401.1	6451.0	433.0	223.0	193.0	167.0	159.0	171.0	144.0	112.0	109.0
80°	6654.0	3623.0	358.0	176.0	145.0	129.0	133.0	145.0	126.0	101.0	97.0
82.5°	2686.0	1434.0	252.0	137.0	106.0	103.0	109.0	118.0	104.0	85.0	83.0
85°	959.0	448.0	143.0	90.0	68.0	71.0	70.0	84.0	75.0	62.0	61.0
87.5°	252.0	89.0	64.0	36.0	29.0	29.0	27.0	39.0	36.0	28.0	31.0
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)