

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: P510869

Luminaire Tested: **CST-CA8-480-760-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
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-T3
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: 70980 lumens
Efficiency: N/A
Efficacy: 147.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

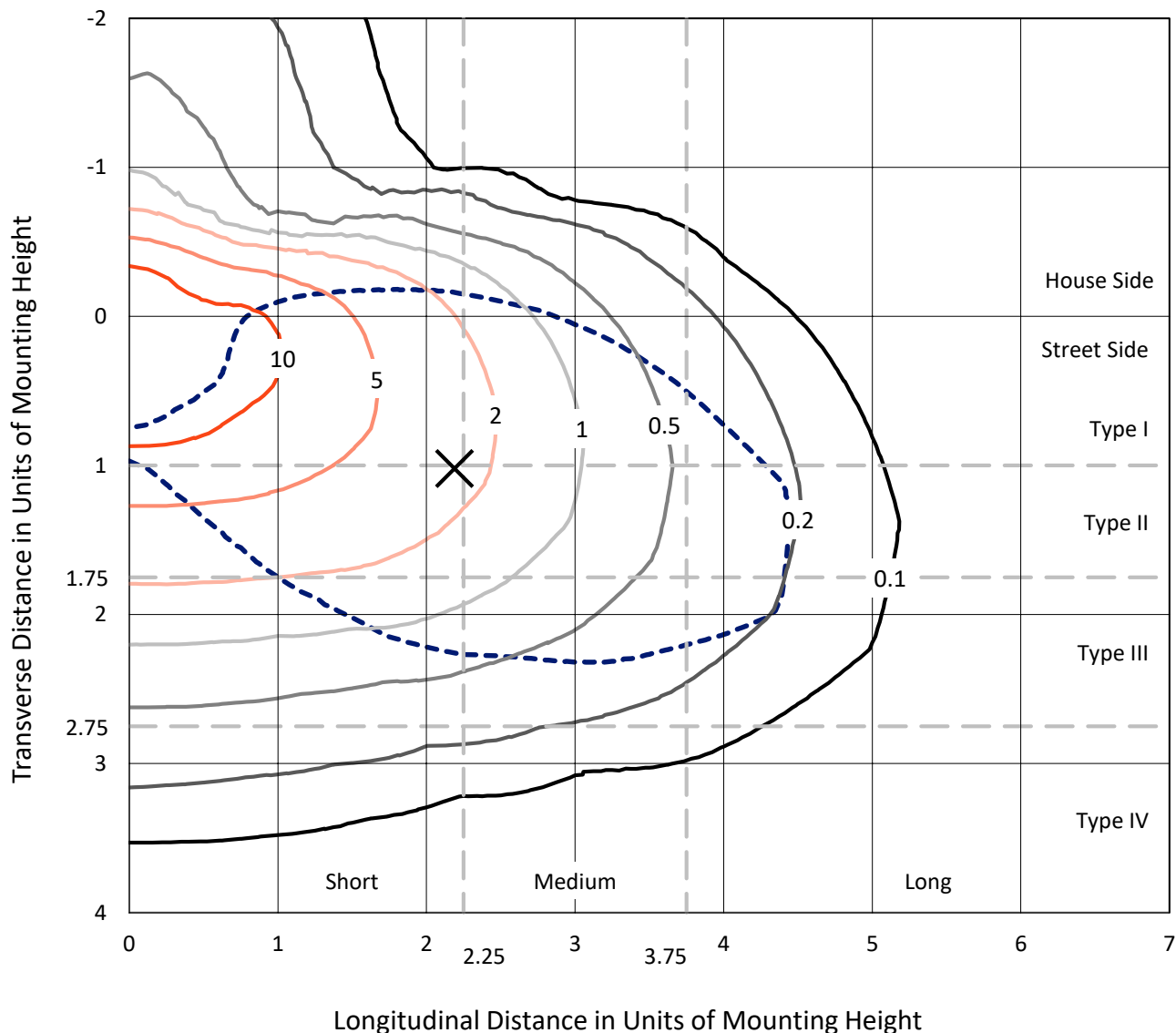
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

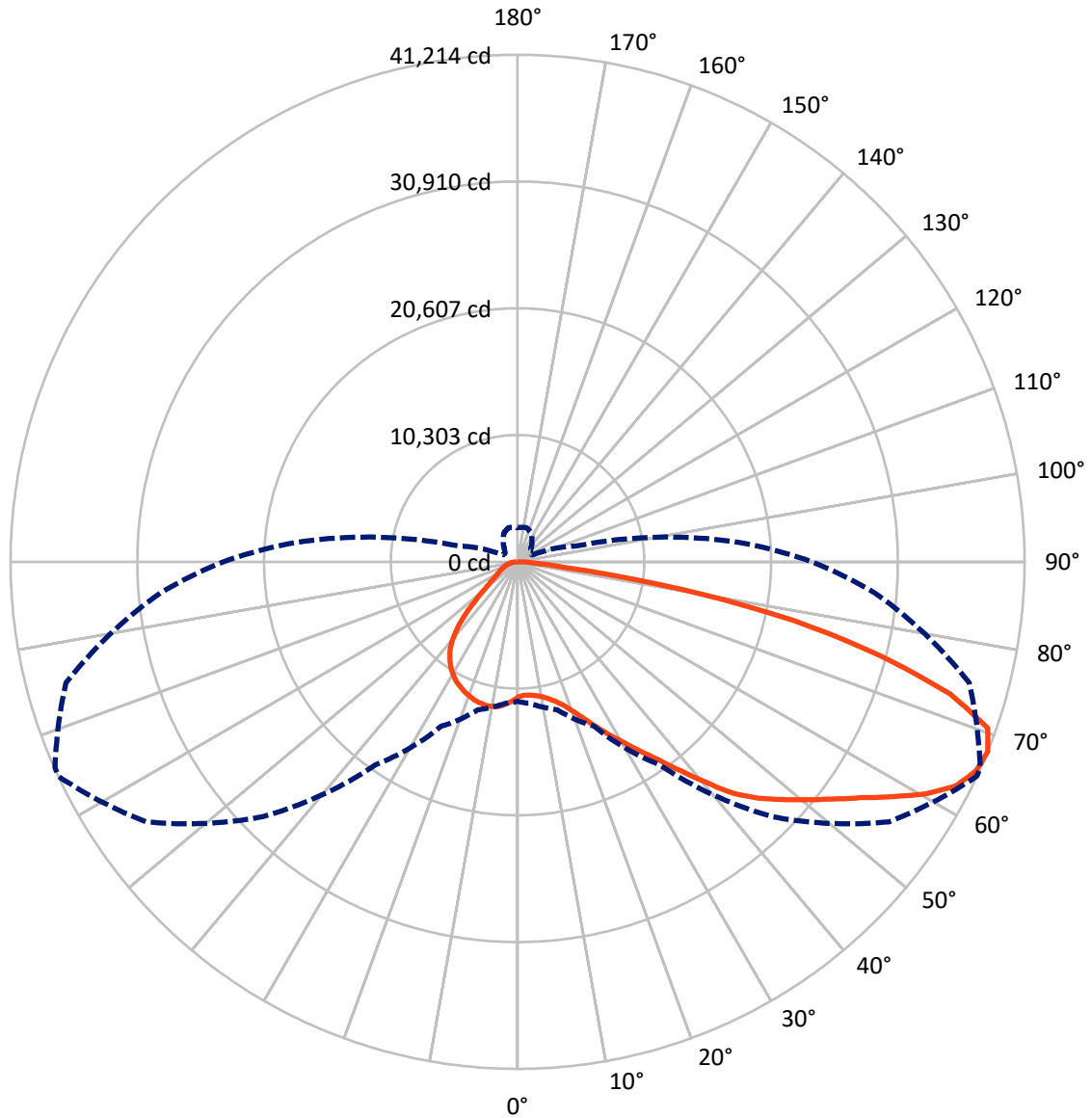
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.6 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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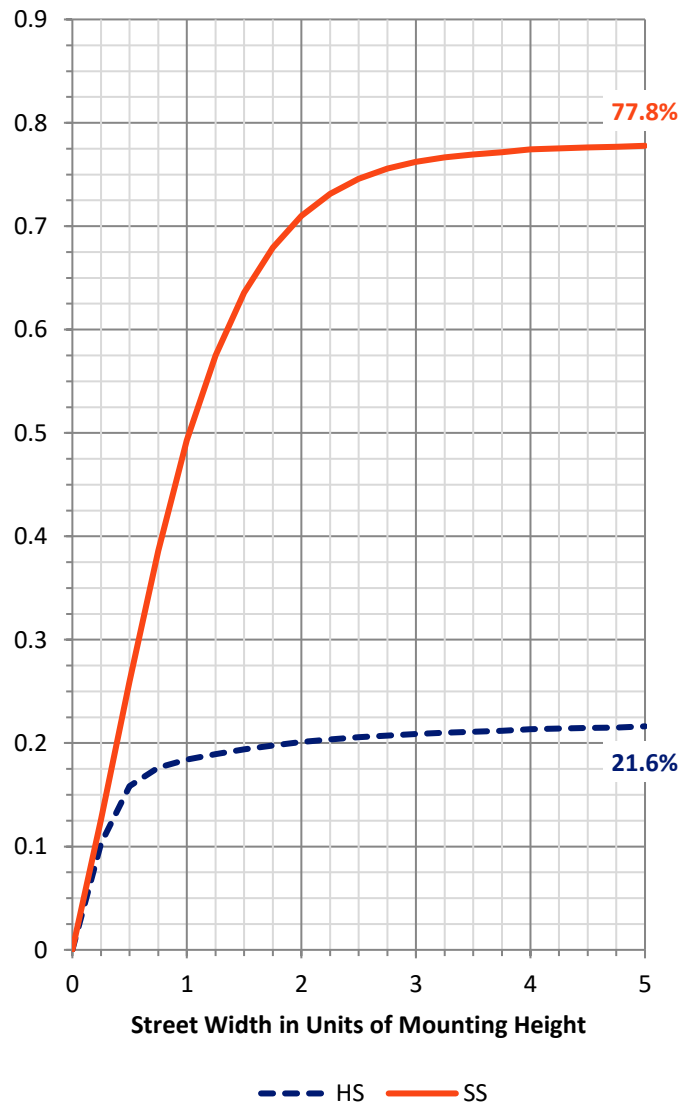
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15678.6	0.0	15678.6
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	55301.4	0.0	55301.4
	% Fixture	77.9	0.0	77.9
Total	Lumens	70980.0	0.0	70980.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1092.4	1.5
10°-20°	3412.9	4.8
20°-30°	5908.2	8.3
30°-40°	8681.5	12.2
40°-50°	11734.1	16.5
50°-60°	14429.5	20.3
60°-70°	15462.1	21.8
70°-80°	9119.4	12.8
80°-90°	1139.9	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°	70980.0	100.0
0°-180°	70980.0	100.0

Coefficient of Utilization

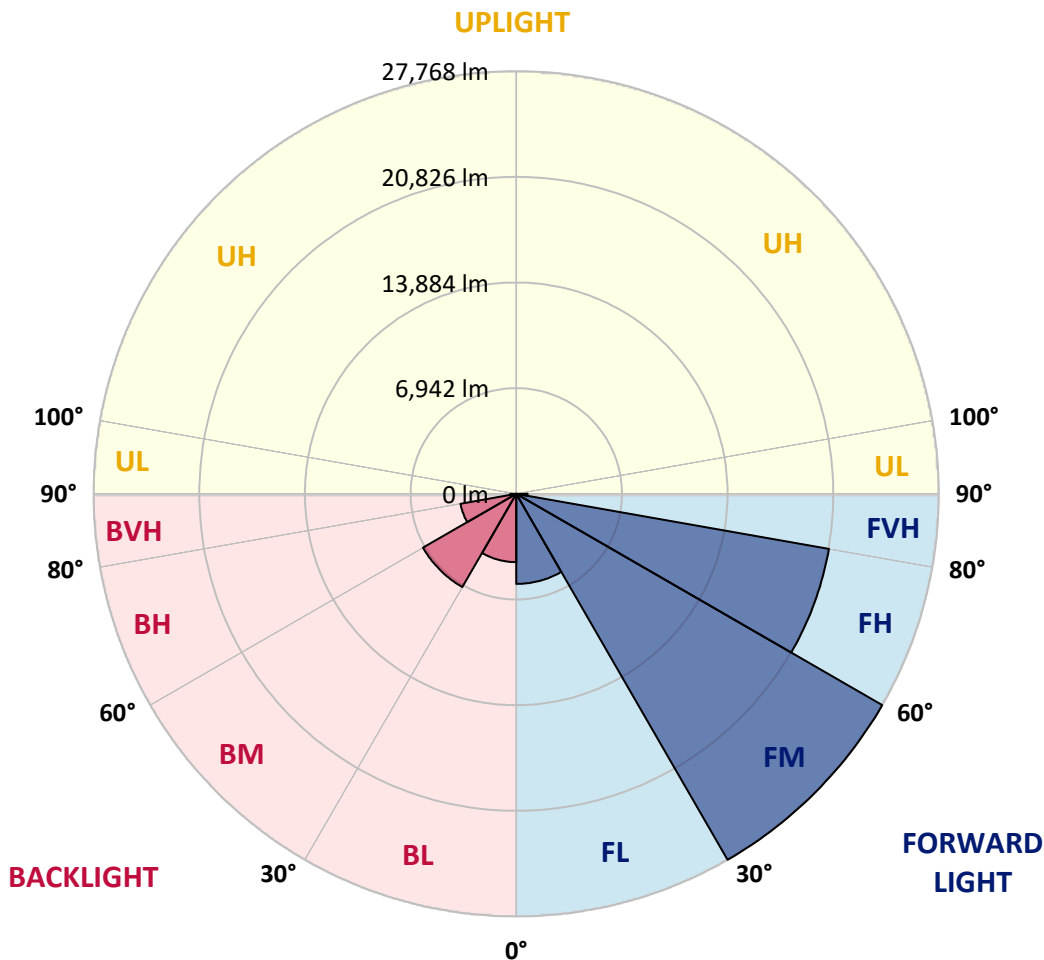


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5922.7	8.3			
FM (30°-60°)	27767.9	39.1			
FH (60°-80°)	20863.4	29.4			G5
FVH (80°-90°)	747.5	1.1			G4/750
BL (0°-30°)	4490.8	6.3	B4/5000		
BM (30°-60°)	7077.3	10.0	B4/8500		
BH (60°-80°)	3718.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	392.4	0.6			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7
2.5°	10756.8	10736.5	10727.8	10755.3	10775.6	10798.7	10832.0	10863.9	10868.2	10910.2	10965.2
5°	10887.0	10869.7	10850.8	10846.5	10839.3	10837.8	10846.5	10882.7	10891.4	10931.9	11050.5
7.5°	11176.5	11159.1	11124.4	11111.3	11072.3	11002.8	10969.5	10988.3	10992.7	11041.9	11189.5
10°	11648.2	11594.7	11552.7	11509.3	11386.3	11276.3	11195.3	11160.5	11153.3	11201.1	11371.8
12.5°	12211.2	12166.3	12120.0	12005.7	11849.4	11651.1	11507.9	11428.3	11422.5	11463.0	11591.8
15°	12806.0	12806.0	12774.1	12638.1	12484.7	12156.2	11934.8	11801.6	11810.3	11842.1	11901.5
17.5°	13574.4	13510.7	13496.3	13341.4	13170.6	12871.1	12519.4	12306.7	12316.8	12331.3	12286.4
20°	14355.9	14337.1	14315.4	14212.6	14057.8	13672.8	13277.7	12998.4	12999.9	12947.8	12748.1
22.5°	15389.1	15326.9	15342.8	15227.1	15017.2	14622.2	14167.7	13836.3	13858.0	13782.8	13421.0
25°	16415.2	16353.0	16319.7	16241.5	16060.6	15685.8	15146.0	14842.1	14816.1	14680.0	14154.7
27.5°	17439.8	17403.6	17431.1	17337.0	17189.4	16771.2	16276.3	15939.1	15956.4	15862.4	15079.5
30°	18500.6	18460.0	18580.1	18428.2	18337.0	17930.4	17455.7	17059.2	17073.6	17108.4	16230.0
32.5°	19300.8	19348.6	19558.4	19541.1	19523.7	19070.7	18571.5	18351.5	18373.2	18494.8	17596.1
35°	20073.6	20078.0	20373.2	20596.0	20690.1	20311.0	19792.9	19785.6	19927.5	20297.9	19500.5
37.5°	20714.7	20700.2	21093.9	21439.7	21697.3	21403.6	21118.5	21562.8	21691.6	22460.0	21418.0
40°	21064.9	21095.3	21601.8	22033.1	22539.6	22400.7	22431.1	23567.1	23884.0	24556.9	22852.2
42.5°	20818.9	20911.5	21700.2	22580.1	23344.2	23529.4	24140.2	25732.0	25866.6	25988.2	24263.2
45°	20406.5	20503.4	21377.5	22798.6	24008.5	24791.4	25840.6	27397.7	27545.3	27409.3	25436.8
47.5°	19976.7	20076.5	21050.5	22710.4	24558.4	26059.1	27352.9	28870.9	29059.1	28637.9	26565.6
50°	19431.1	19585.9	20651.0	22523.7	25004.1	27426.7	28784.1	30387.6	30474.4	29866.6	27420.9
52.5°	18759.6	18930.4	20082.3	22203.8	25352.9	28381.8	30232.7	32033.0	32024.3	31302.2	28399.2
55°	18053.4	18208.2	19394.9	21700.2	25548.2	29117.0	31390.4	33846.3	33950.5	33345.6	29284.8
57.5°	17148.9	17289.3	18583.0	21023.0	25345.6	29740.7	33266.0	36001.1	36053.2	34768.1	29989.6
60°	15950.6	16157.6	17457.1	20161.9	24763.9	30462.8	35332.5	38267.4	38331.0	36167.5	30442.6
62.5°	14635.2	14717.7	16041.8	18836.3	23917.3	31020.0	36765.2	40040.2	39947.5	37261.6	30578.6
65°	13031.7	13096.8	14243.0	17131.5	22344.2	30714.6	37279.0	40951.9	40837.5	37949.0	30160.4
67.5°	11353.0	11554.2	12454.3	14766.9	20148.9	29305.1	36844.8	41213.8	41155.9	38001.1	29161.8
70°	9173.6	9244.5	10057.8	12030.3	16811.7	26483.1	35397.6	40542.3	40497.5	36837.6	27122.8
72.5°	6468.8	6399.4	6794.4	8341.5	12143.2	21066.4	30222.6	36769.6	36844.8	32953.4	23619.2
75°	3434.1	3567.3	4182.3	5107.0	6884.2	13542.6	24095.3	30431.0	30404.9	27555.5	18669.9
77.5°	1829.2	1826.3	2248.9	2644.0	3370.4	6222.8	15892.8	22949.1	23076.5	21350.0	12819.0
80°	878.4	911.7	937.8	1075.2	1680.2	2875.5	6648.3	13308.1	14176.4	12733.6	6089.7
82.5°	703.3	706.2	709.1	678.7	694.6	1170.8	2561.5	3850.9	3989.8	3206.9	1963.8
85°	521.0	489.1	484.8	411.0	464.5	703.3	1292.3	1644.0	1562.9	1521.0	1108.5
87.5°	209.8	196.8	191.0	179.4	179.4	264.8	455.9	594.8	593.3	541.2	371.9
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°	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7	10963.7
2.5°	11008.6	11060.7	11182.2	11286.4	11325.5	11421.0	11510.7	11562.8	11599.0	11620.7	11719.1
5°	11122.9	11227.1	11421.0	11567.2	11709.0	11885.6	11999.9	12072.2	12112.8	12135.9	12206.8
7.5°	11298.0	11403.7	11609.2	11833.5	11963.7	12108.4	12182.2	12234.3	12260.4	12253.1	12309.6
10°	11454.3	11558.5	11764.0	11936.2	12010.0	12092.5	12131.6	12143.2	12144.6	12150.4	12206.8
12.5°	11667.0	11730.7	11840.7	11953.6	11937.7	11940.6	11973.8	11959.4	11926.1	11920.3	11957.9
15°	11895.7	11897.1	11905.8	11881.2	11781.4	11738.0	11691.6	11652.6	11561.4	11555.6	11614.9
17.5°	12182.2	12114.2	11956.5	11788.6	11551.3	11387.7	11222.8	11154.7	11043.3	11021.6	11050.5
20°	12551.3	12409.4	12025.9	11609.2	11164.9	10872.5	10672.8	10471.7	10316.8	10279.2	10306.7
22.5°	13080.9	12801.6	12114.2	11418.1	10730.7	10231.5	9843.6	9601.9	9341.4	9208.3	9221.3
25°	13720.6	13283.5	12267.6	11176.5	10219.9	9499.2	8869.7	8384.9	8091.1	7895.7	7947.8
27.5°	14558.5	13957.9	12451.4	10937.7	9584.6	8562.9	7649.7	6992.7	6693.1	6600.5	6539.7
30°	15529.5	14772.7	12645.3	10584.6	8898.6	7403.7	6234.4	5687.4	5344.4	5289.4	5243.1
32.5°	16829.1	15798.7	13008.6	10201.1	8079.5	6244.5	4975.4	4345.8	4267.7	4222.8	4212.7
35°	18504.9	17143.1	13389.2	9703.2	7011.5	4885.6	3764.1	3424.0	3386.4	3435.6	3439.9
37.5°	20283.5	18601.9	13845.0	9141.7	5782.9	3645.4	2879.9	2644.0	2685.9	2839.3	2874.1
40°	21487.5	19562.8	14258.9	8379.1	4264.8	2648.3	2095.5	2044.8	2276.4	2473.2	2513.7
42.5°	22642.3	20290.7	14426.8	7370.4	3041.9	1885.7	1691.7	1865.4	2189.6	2405.2	2434.1
45°	23627.9	21137.3	14004.2	6160.6	2062.2	1576.0	1620.8	1861.1	2221.4	2460.2	2481.9
47.5°	24565.6	21829.0	13426.8	4853.8	1626.6	1516.6	1619.4	1900.1	2292.3	2518.1	2531.1
50°	25461.4	22355.8	12441.3	3693.2	1523.9	1489.1	1632.4	1960.9	2331.4	2473.2	2467.4
52.5°	26125.7	22627.9	11392.1	2981.2	1483.3	1467.4	1667.1	2037.6	2338.6	2424.0	2418.2
55°	26613.4	22575.8	10703.2	2441.4	1450.1	1458.7	1723.6	2095.5	2408.1	2536.9	2532.5
57.5°	26658.2	22339.9	9920.3	2062.2	1409.5	1457.3	1784.4	2176.5	2755.4	2992.7	2920.4
60°	26604.7	21949.1	9138.8	1810.4	1364.7	1466.0	1848.0	2419.7	3256.1	3442.8	3392.2
62.5°	26341.3	21221.2	7968.1	1644.0	1325.6	1497.8	1895.8	2612.1	3231.5	3253.2	3180.9
65°	25528.0	20247.3	6431.2	1476.1	1286.5	1519.5	1934.9	2662.8	2968.1	2898.7	2862.5
67.5°	23918.7	18072.2	4960.9	1322.7	1235.9	1515.2	2050.6	2590.4	2868.3	2817.6	2771.3
70°	21632.2	15600.4	3444.3	1165.0	1150.5	1487.7	2021.7	2615.0	2820.5	2742.4	2680.1
72.5°	18072.2	12238.7	2191.0	1036.2	1023.1	1422.6	1949.3	2599.1	2788.7	2754.0	2668.6
75°	13607.7	8542.6	1392.2	895.8	910.3	1303.9	1833.6	2513.7	2772.8	2664.2	2500.7
77.5°	8567.2	4217.0	1082.5	761.2	782.9	1124.4	1584.6	2195.3	2661.3	2596.2	2386.4
80°	3240.2	1712.0	846.6	617.9	636.8	874.1	1299.6	1806.1	2450.0	2557.1	2467.4
82.5°	1492.0	1070.9	635.3	496.4	503.6	636.8	969.6	1337.2	2073.8	2347.3	2571.6
85°	871.2	701.9	424.0	331.4	344.4	376.3	545.6	816.2	1344.4	1790.1	2002.9
87.5°	296.7	244.6	165.0	140.4	136.0	154.8	131.7	267.7	399.4	703.3	803.2
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)