

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: P510817

Luminaire Tested: **CST-CA8-480-722-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-722-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57493 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

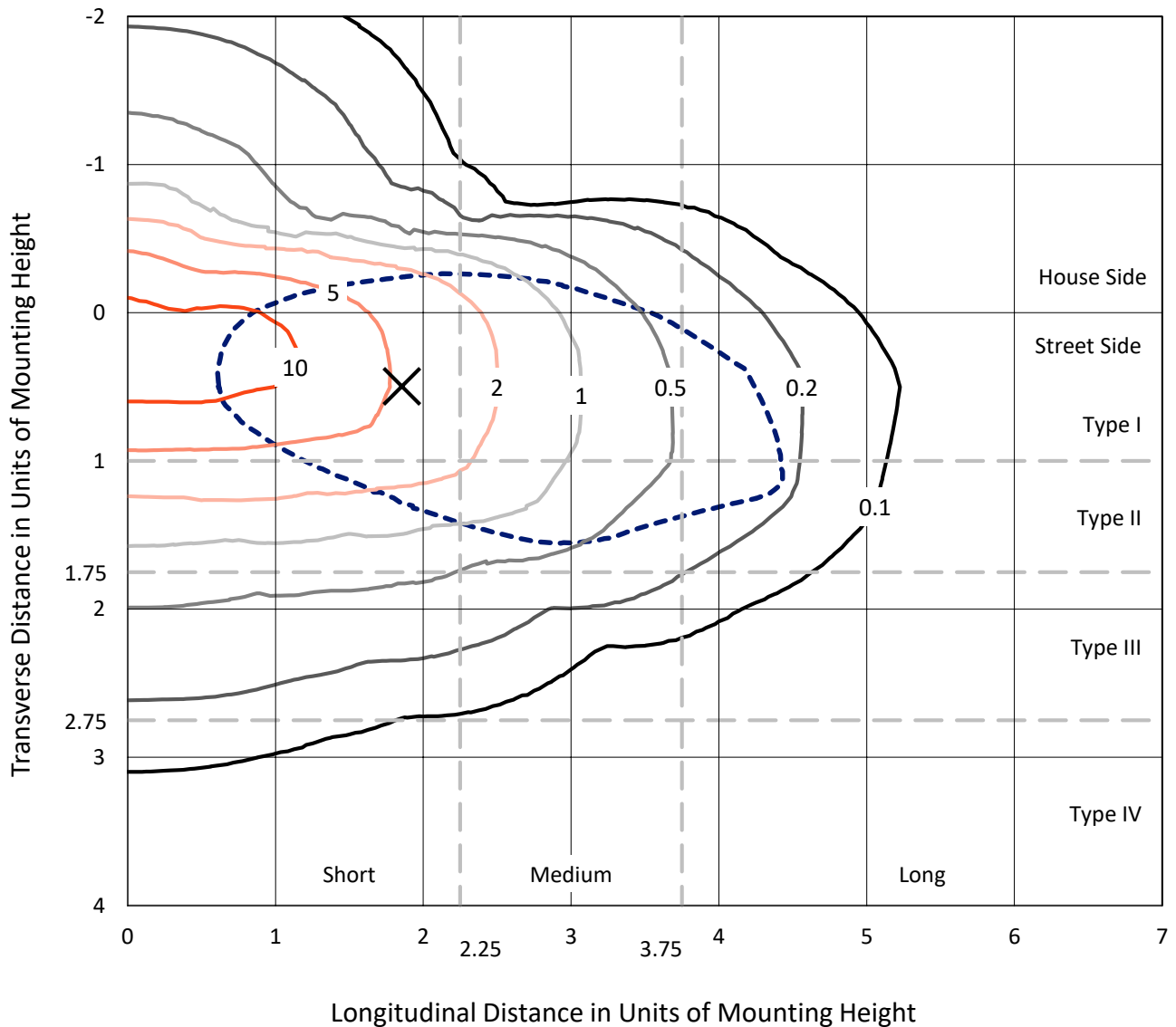
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

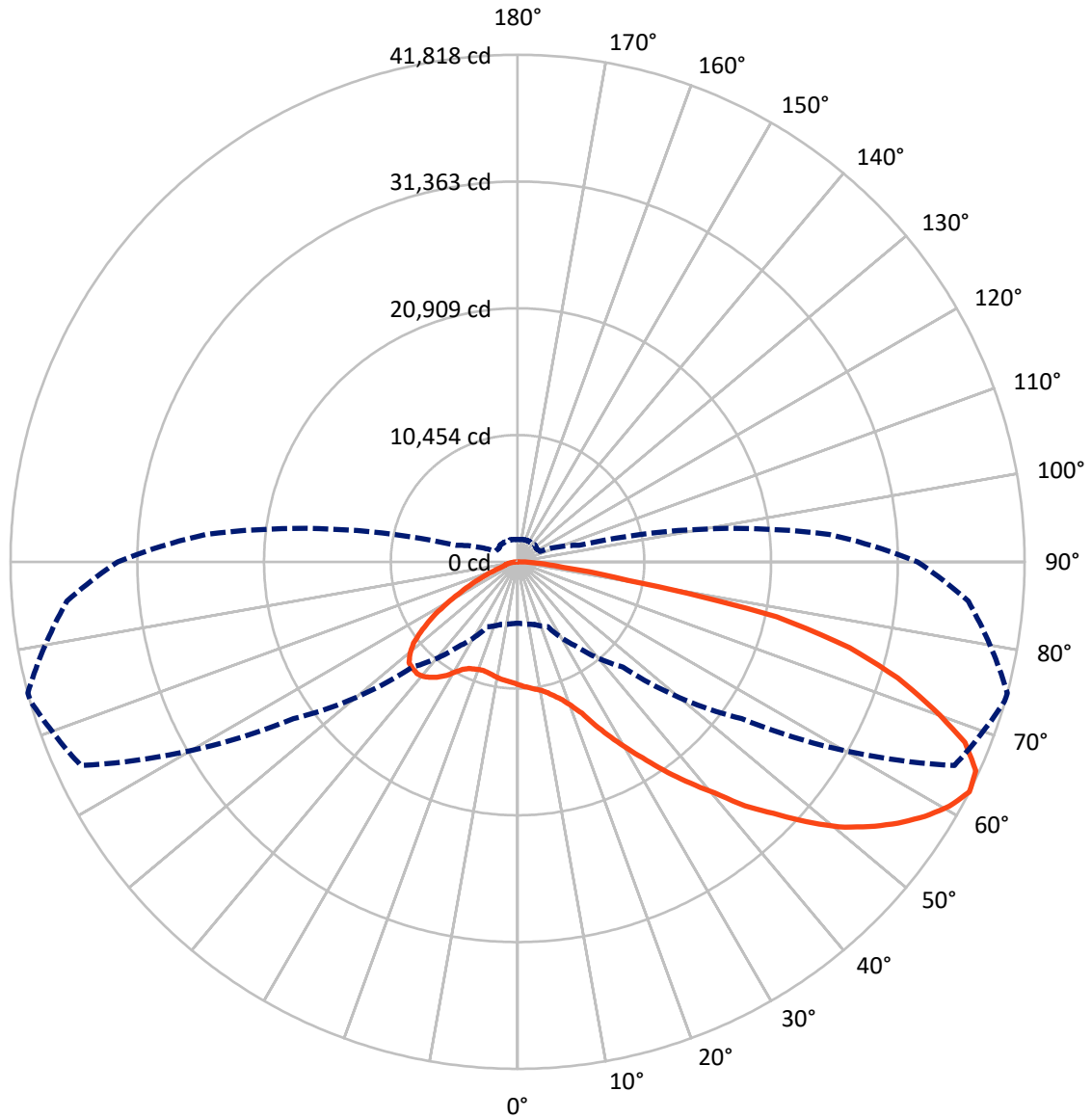
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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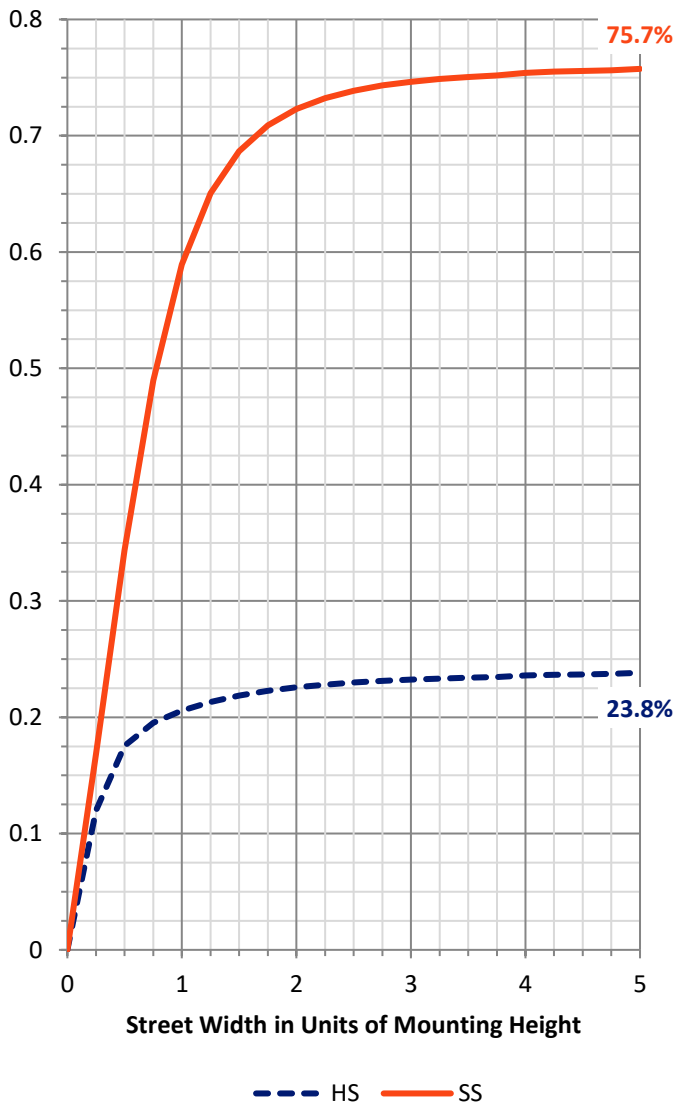
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13929.5	0.0	13929.5
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	43563.5	0.0	43563.5
	% Fixture	75.8	0.0	75.8
Total	Lumens	57493.0	0.0	57493.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	975.0	1.7
10°-20°	2959.0	5.1
20°-30°	5103.6	8.9
30°-40°	7525.3	13.1
40°-50°	9920.0	17.3
50°-60°	11675.0	20.3
60°-70°	11615.5	20.2
70°-80°	6773.8	11.8
80°-90°	945.8	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°	57493.0	100.0
0°-180°	57493.0	100.0

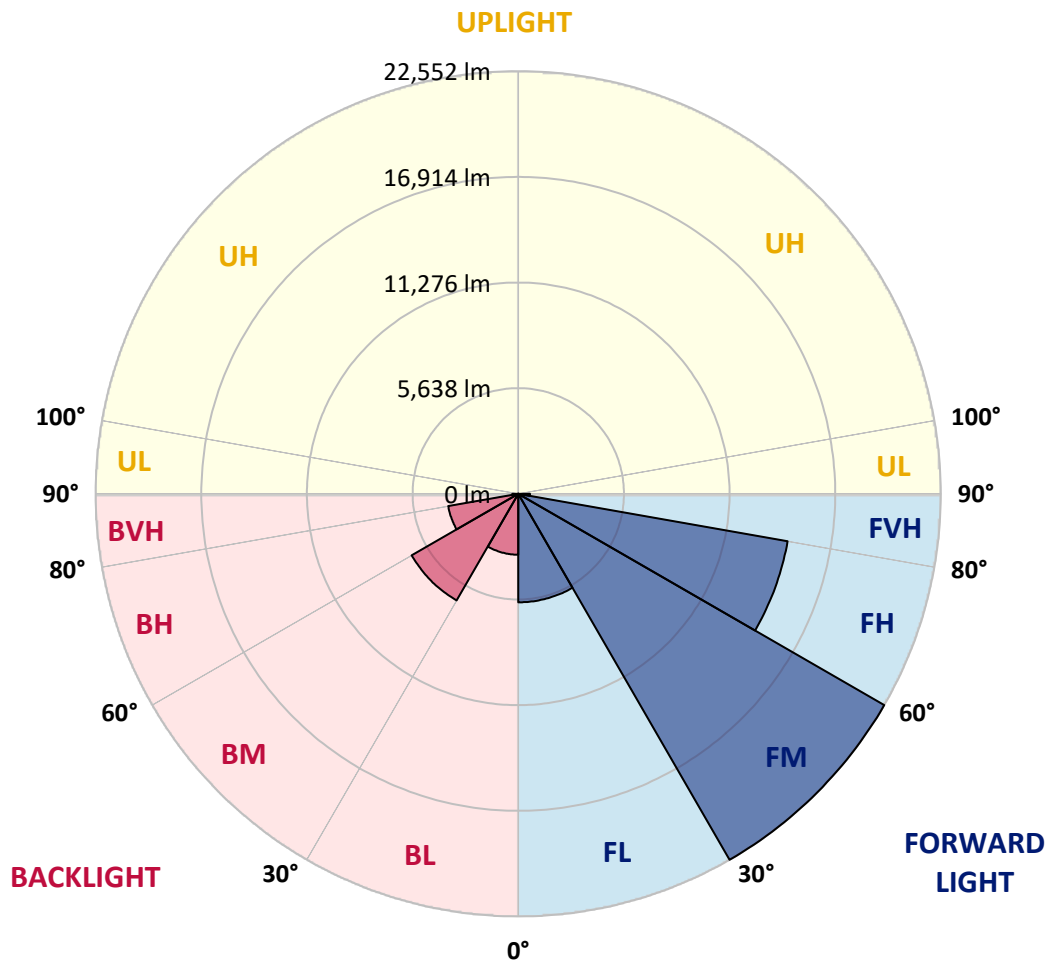


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5789.3	10.1			
FM (30°-60°)	22552.2	39.2			
FH (60°-80°)	14594.4	25.4			G5
FVH (80°-90°)	627.6	1.1			G4/750
BL (0°-30°)	3248.3	5.6	B4/5000		
BM (30°-60°)	6568.2	11.4	B4/8500		
BH (60°-80°)	3794.9	6.6	B4/5000		G4/5000
BVH (80°-90°)	318.2	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7
2.5°	10689.7	10645.9	10651.8	10621.0	10574.9	10540.6	10450.6	10353.6	10295.6	10290.9	10208.1
5°	11226.9	11241.1	11244.6	11146.4	11049.4	10939.3	10802.1	10615.1	10462.5	10438.8	10277.9
7.5°	11716.7	11715.6	11708.5	11654.0	11609.1	11445.8	11171.2	10877.8	10629.3	10606.8	10345.3
10°	12218.4	12214.9	12143.9	12052.8	11951.0	11800.7	11565.3	11213.8	10811.5	10782.0	10408.0
12.5°	12765.1	12726.1	12681.1	12571.1	12450.4	12190.0	11942.7	11560.5	11140.5	11087.2	10519.3
15°	13215.9	13175.7	13113.0	13038.4	12911.8	12713.0	12450.4	11997.2	11546.3	11494.3	10768.9
17.5°	13662.0	13643.1	13598.1	13518.9	13421.8	13250.3	13008.9	12624.3	12033.9	11970.0	11184.3
20°	14027.7	13982.7	13949.6	13986.2	13994.5	13867.9	13735.4	13412.4	12761.6	12663.3	11694.3
22.5°	14235.9	14226.4	14407.5	14542.4	14596.8	14625.2	14583.8	14323.5	13734.2	13562.6	12404.2
25°	14433.5	14418.1	14664.3	15001.5	15322.2	15485.4	15595.5	15629.8	15089.1	14934.0	13546.1
27.5°	14439.4	14482.0	14839.4	15405.0	15893.7	16391.8	16919.6	16979.9	16505.4	16382.4	14845.3
30°	14471.4	14490.3	14844.1	15493.7	16511.3	17310.0	17997.5	18337.1	17927.7	17870.9	16275.9
32.5°	14065.5	14090.4	14640.6	15648.7	16977.6	18260.2	19172.5	19676.6	19574.8	19502.6	17802.3
35°	13643.1	13664.4	14303.4	15428.7	17324.2	19122.8	20233.9	21224.3	21410.1	21355.6	19505.0
37.5°	12980.5	13051.5	13721.2	15166.0	17384.6	19757.1	21246.8	22766.1	23327.0	23163.7	21306.0
40°	12261.0	12313.1	13092.9	14615.7	17317.1	20173.6	22241.9	24472.4	25151.6	25064.0	23093.9
42.5°	11352.3	11491.9	12272.9	13912.9	16970.5	20432.7	23162.5	26407.0	27393.9	27511.0	24736.2
45°	10586.7	10583.2	11308.5	12895.3	16342.1	20494.2	24009.7	28363.0	29806.6	29586.5	26907.5
47.5°	9686.2	9722.9	10480.2	11882.4	15415.6	20299.0	24670.0	30675.1	32136.4	32016.9	28688.4
50°	7602.5	7866.4	9300.5	11011.5	14162.6	19754.7	25220.2	32926.8	34321.9	34376.3	30307.1
52.5°	6554.1	6655.9	7447.5	10134.7	13050.3	18841.2	25823.7	35460.2	36434.1	36295.6	32144.7
55°	6134.1	6188.5	6568.3	8559.8	11974.7	17427.2	26113.6	37773.5	38081.2	38058.7	33656.9
57.5°	5830.0	5871.4	6141.2	7143.4	10793.8	15612.1	25868.6	39278.6	39756.7	39609.9	35083.9
60°	5391.0	5424.1	5826.4	6437.0	9578.6	13779.2	24362.3	39961.4	40971.9	40917.5	36345.3
62.5°	5060.8	5117.6	5342.5	5915.2	8540.8	12269.3	22567.3	39748.4	41769.4	41817.9	37308.5
65°	4711.8	4762.7	4953.2	5453.7	7600.1	11276.6	20631.5	38681.1	41402.6	41531.6	37464.7
67.5°	4281.1	4320.1	4546.1	4979.2	6500.9	10283.8	18448.4	36793.8	39367.4	39782.7	35909.9
70°	3739.1	3753.3	4030.2	4324.8	5398.1	8787.0	14669.0	33704.2	36422.2	36430.5	32974.2
72.5°	2975.9	2987.8	3061.1	3284.8	4055.1	6954.1	10782.0	28161.8	32841.6	32781.3	29306.0
75°	2023.4	2127.5	2381.9	2594.9	2925.0	4883.4	6705.6	18973.7	27824.6	28297.9	24072.4
77.5°	1598.6	1608.1	1713.4	1908.6	2193.8	3648.0	3758.1	10498.0	20743.9	21869.2	18921.7
80°	1114.6	1131.2	1074.4	1121.7	1530.0	2496.7	2196.1	4568.6	8650.9	9236.6	11360.6
82.5°	531.3	550.2	631.9	586.9	760.8	1061.4	1159.6	2360.6	3736.8	3835.0	4423.1
85°	350.2	350.2	351.4	332.5	443.7	462.7	526.6	1007.0	1824.6	1886.1	1875.5
87.5°	112.4	124.2	120.7	140.8	170.4	153.8	160.9	315.9	625.9	620.0	518.3
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°	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7	10134.7
2.5°	10148.9	10100.4	9986.8	9887.4	9789.2	9714.6	9650.7	9565.6	9525.3	9488.6	9565.6
5°	10178.5	10092.1	9888.6	9685.1	9498.1	9360.8	9276.8	9215.3	9159.7	9159.7	9185.7
7.5°	10212.8	10095.7	9804.6	9515.9	9235.4	9079.2	8959.7	8881.6	8836.7	8839.0	8894.6
10°	10235.3	10055.4	9708.7	9319.4	9014.1	8763.3	8646.1	8533.7	8448.5	8397.7	8454.5
12.5°	10261.3	10042.4	9579.7	9140.8	8769.2	8485.2	8241.5	8157.5	8074.6	8010.7	8041.5
15°	10422.2	10092.1	9472.1	8913.6	8482.9	8129.1	7809.6	7655.8	7632.1	7588.3	7599.0
17.5°	10684.9	10225.8	9402.3	8635.5	8138.5	7720.8	7316.2	7117.4	7070.0	7047.6	7059.4
20°	11076.6	10480.2	9423.6	8440.3	7750.4	7283.0	6760.0	6526.9	6369.5	6379.0	6425.2
22.5°	11675.3	10890.8	9539.5	8226.1	7330.4	6717.4	6189.7	5872.6	5714.0	5679.7	5731.8
25°	12629.0	11552.3	9667.3	8021.4	6924.5	6106.9	5522.3	5179.2	4975.6	4962.6	5020.6
27.5°	13851.4	12566.3	9945.4	7843.9	6420.4	5373.2	4792.2	4498.8	4282.3	4256.2	4237.3
30°	15102.1	13692.8	10448.3	7574.1	5832.3	4615.9	4110.7	3881.1	3638.6	3540.3	3561.6
32.5°	16427.3	14742.4	11037.5	7384.8	5174.4	3949.8	3510.8	3291.9	3069.4	2927.4	2894.3
35°	17762.1	15786.0	11533.3	7102.0	4550.9	3420.8	3000.8	2774.8	2580.7	2464.8	2456.5
37.5°	19324.0	16872.2	11930.9	6801.4	3903.6	3006.7	2501.4	2371.3	2277.8	2176.0	2186.7
40°	20888.3	18138.3	12249.2	6304.5	3366.4	2561.8	2128.7	2154.7	2174.8	2089.7	2082.6
42.5°	22187.5	19202.1	12394.7	5660.8	2890.7	2174.8	1964.2	2082.6	2170.1	2114.5	2107.4
45°	23506.8	20097.8	12338.0	4862.1	2495.5	1990.3	1951.2	2071.9	2184.3	2171.3	2165.4
47.5°	24941.0	21271.6	12239.7	3952.1	2212.7	1972.5	1979.6	2036.4	2178.4	2202.1	2192.6
50°	26694.6	22352.0	11658.8	3077.7	2075.5	2000.9	2043.5	2013.9	2134.6	2183.1	2191.4
52.5°	28439.9	23183.8	10881.3	2667.1	2021.0	2028.1	2132.3	2031.7	2084.9	2127.5	2166.6
55°	29786.4	24031.0	9623.5	2419.8	2003.3	2041.1	2157.1	2069.5	2068.4	2068.4	2081.4
57.5°	31165.0	25165.8	8365.7	2260.0	1972.5	2055.3	2127.5	2076.6	2060.1	2036.4	2021.0
60°	32124.6	25585.8	6749.4	2154.7	1940.6	2035.2	2044.7	2037.6	1986.7	1964.2	1946.5
62.5°	32976.5	25814.2	5254.9	2034.0	1896.8	1987.9	1938.2	1922.8	1893.2	1838.8	1848.3
65°	32748.2	25324.3	4004.2	1898.0	1866.0	1931.1	1844.7	1808.0	1810.4	1753.6	1772.5
67.5°	31278.5	23127.0	2875.3	1689.7	1782.0	1818.7	1738.2	1711.0	1670.8	1642.4	1668.4
70°	28309.7	20501.3	1939.4	1402.2	1590.3	1669.6	1616.3	1569.0	1506.3	1487.4	1515.8
72.5°	23827.5	17113.6	1338.3	1127.7	1372.6	1475.5	1455.4	1406.9	1361.9	1408.1	1463.7
75°	19574.8	12661.0	1092.2	924.1	1055.5	1229.4	1288.6	1302.8	1437.7	1887.3	1933.5
77.5°	14090.4	7848.6	982.1	751.4	842.5	983.3	1101.6	1150.1	1756.0	1681.4	1677.9
80°	8215.4	4574.5	749.0	592.8	681.6	720.6	861.4	1350.1	1514.6	1299.2	1267.3
82.5°	3748.6	2018.7	521.8	474.5	473.3	476.9	586.9	1299.2	1162.0	1023.5	985.7
85°	1378.5	710.0	317.1	274.5	314.7	273.3	384.6	952.5	673.3	662.6	552.6
87.5°	339.6	145.5	107.7	89.9	73.4	69.8	117.1	313.6	164.5	150.3	144.4
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)