

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: P510799

Luminaire Tested: **CST-CA8-330-750-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510799
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-CA8-330-750-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49947 lumens
Efficiency: N/A
Efficacy: 150.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

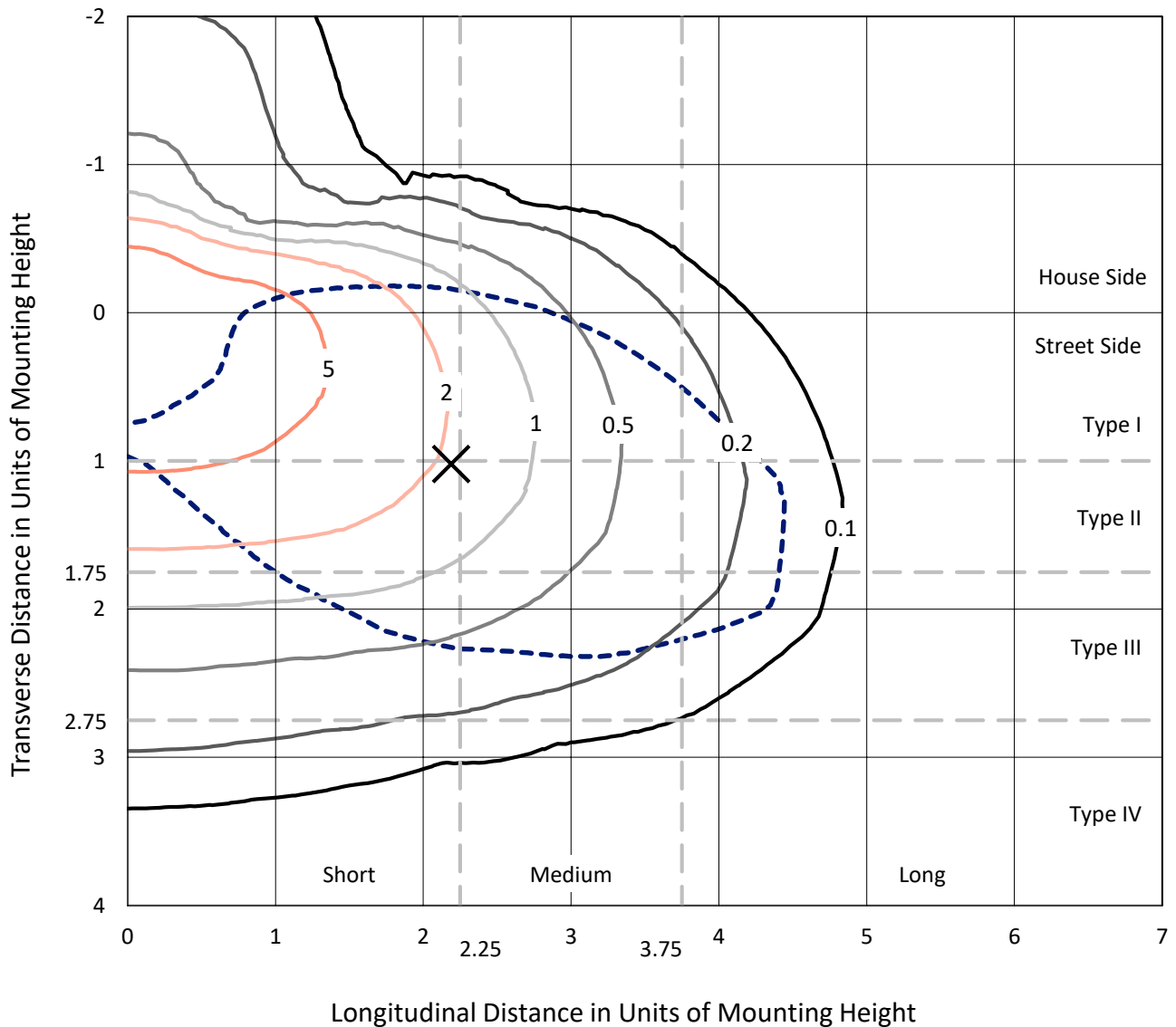
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510799
 CATALOG NUMBER: CST-CA8-330-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

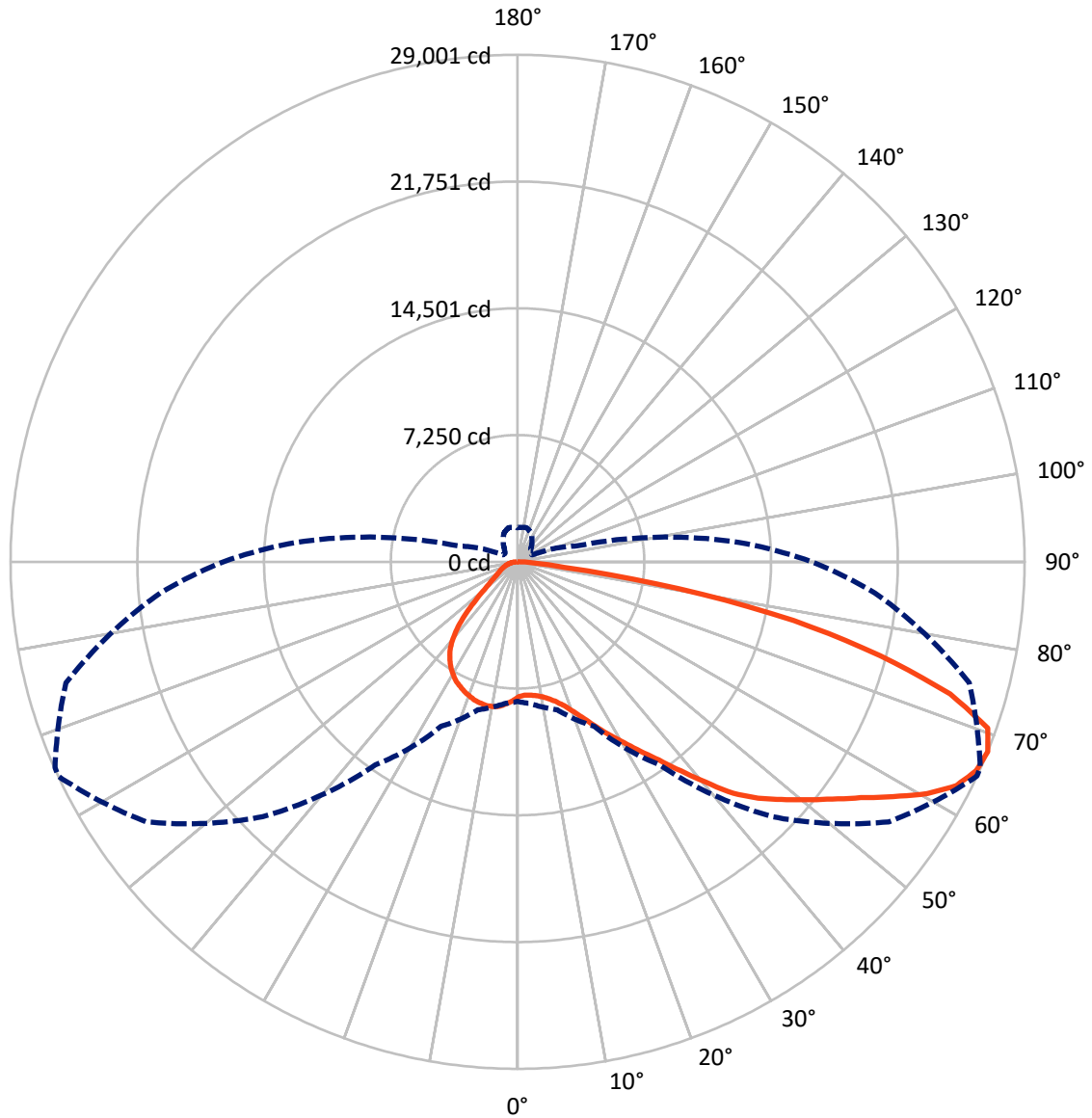
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Short - N/A

REPORT NUMBER: P510799
CATALOG NUMBER: CST-CA8-330-750-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510799
 CATALOG NUMBER: CST-CA8-330-750-U-T3

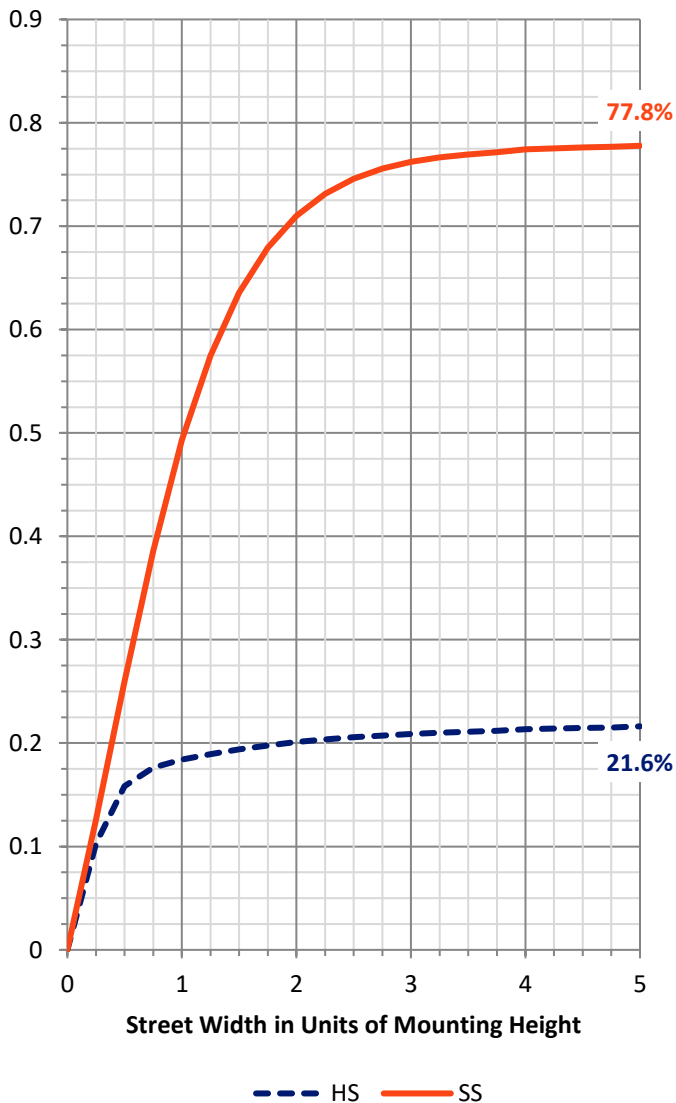
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11032.7	0.0	11032.7
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	38914.3	0.0	38914.3
	% Fixture	77.9	0.0	77.9
Total	Lumens	49947.0	0.0	49947.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	768.7	1.5
10°-20°	2401.6	4.8
20°-30°	4157.5	8.3
30°-40°	6109.0	12.2
40°-50°	8257.0	16.5
50°-60°	10153.7	20.3
60°-70°	10880.3	21.8
70°-80°	6417.1	12.8
80°-90°	802.1	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°	49947.0	100.0
0°-180°	49947.0	100.0



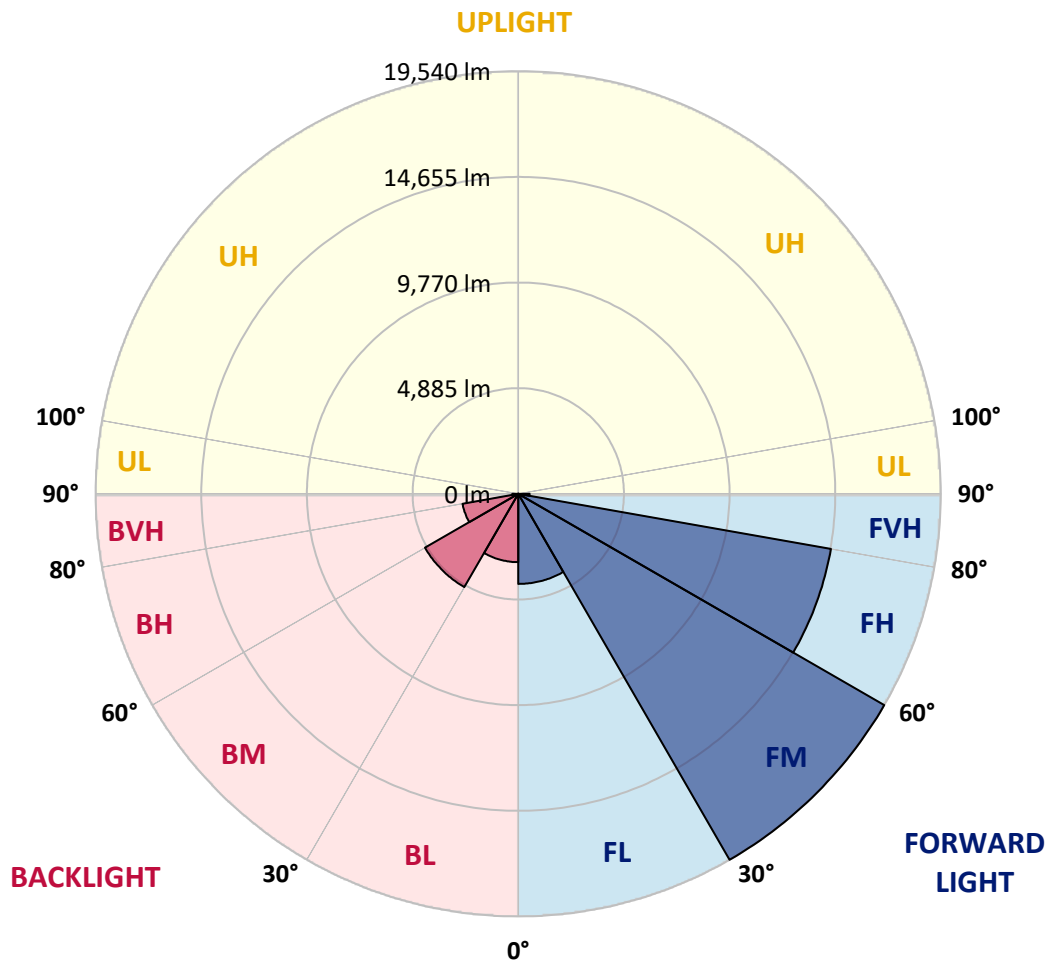
REPORT NUMBER: P510799
 CATALOG NUMBER: CST-CA8-330-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4167.7	8.3			
FM (30°-60°)	19539.6	39.1			
FH (60°-80°)	14681.1	29.4			G5
FVH (80°-90°)	526.0	1.1			G4/750
BL (0°-30°)	3160.1	6.3	B4/5000		
BM (30°-60°)	4980.1	10.0	B3/5000		
BH (60°-80°)	2616.4	5.2	B4/5000		G4/5000
BVH (80°-90°)	276.1	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





REPORT NUMBER: P510799

CATALOG NUMBER: CST-CA8-330-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9
2.5°	7569.3	7555.0	7548.9	7568.3	7582.5	7598.8	7622.2	7644.7	7647.7	7677.2	7715.9
5°	7660.9	7648.7	7635.5	7632.4	7627.3	7626.3	7632.4	7657.9	7664.0	7692.5	7776.0
7.5°	7864.6	7852.4	7828.0	7818.8	7791.3	7742.4	7719.0	7732.2	7735.3	7769.9	7873.8
10°	8196.6	8158.9	8129.4	8098.8	8012.3	7934.9	7877.9	7853.4	7848.3	7881.9	8002.1
12.5°	8592.7	8561.2	8528.6	8448.1	8338.1	8198.6	8097.8	8041.8	8037.7	8066.2	8156.9
15°	9011.3	9011.3	8988.9	8893.1	8785.2	8554.0	8398.2	8304.5	8310.6	8333.0	8374.8
17.5°	9552.0	9507.2	9497.0	9388.0	9267.9	9057.1	8809.6	8659.9	8667.1	8677.2	8645.7
20°	10101.9	10088.7	10073.4	10001.1	9892.1	9621.2	9343.2	9146.7	9147.7	9111.1	8970.5
22.5°	10829.0	10785.2	10796.4	10714.9	10567.3	10289.3	9969.5	9736.3	9751.6	9698.6	9444.1
25°	11551.0	11507.2	11483.8	11428.8	11301.5	11037.8	10657.9	10444.1	10425.7	10330.0	9960.4
27.5°	12272.0	12246.5	12265.9	12199.7	12095.8	11801.5	11453.2	11216.0	11228.2	11162.0	10611.1
30°	13018.4	12989.9	13074.4	12967.5	12903.3	12617.2	12283.2	12004.2	12014.3	12038.8	11420.6
32.5°	13581.6	13615.2	13762.8	13750.6	13738.4	13419.6	13068.3	12913.5	12928.8	13014.3	12382.0
35°	14125.3	14128.4	14336.1	14493.0	14559.2	14292.4	13927.8	13922.7	14022.5	14283.2	13722.1
37.5°	14576.5	14566.3	14843.3	15086.7	15267.9	15061.2	14860.6	15173.2	15263.8	15804.6	15071.4
40°	14822.9	14844.3	15200.7	15504.2	15860.6	15762.8	15784.2	16583.6	16806.6	17280.2	16080.6
42.5°	14649.8	14715.0	15270.0	15889.1	16426.8	16557.1	16986.9	18107.0	18201.7	18287.3	17073.4
45°	14359.6	14427.8	15042.9	16042.9	16894.2	17445.1	18183.4	19279.1	19383.0	19287.3	17899.3
47.5°	14057.1	14127.4	14812.7	15980.8	17281.2	18337.2	19247.6	20315.8	20448.2	20151.9	18693.6
50°	13673.2	13782.2	14531.7	15849.4	17594.8	19299.5	20254.7	21383.0	21444.1	21016.4	19295.4
52.5°	13200.7	13320.9	14131.5	15624.3	17840.2	19971.6	21274.1	22540.9	22534.8	22026.6	19983.8
55°	12703.7	12812.7	13647.7	15270.0	17977.7	20488.9	22088.7	23816.9	23890.2	23464.5	20607.1
57.5°	12067.3	12166.1	13076.5	14793.4	17835.1	20927.8	23408.5	25333.2	25369.8	24465.5	21103.0
60°	11224.1	11369.7	12284.2	14187.5	17425.8	21436.0	24862.7	26927.9	26972.7	25450.3	21421.7
62.5°	10298.4	10356.5	11288.3	13254.7	16830.0	21828.0	25870.8	28175.3	28110.2	26220.1	21517.5
65°	9170.1	9215.9	10022.5	12055.1	15723.1	21613.2	26232.4	28816.9	28736.4	26703.8	21223.2
67.5°	7988.9	8130.4	8763.8	10391.1	14178.3	20621.3	25926.8	29001.2	28960.5	26740.5	20520.5
70°	6455.2	6505.1	7077.4	8465.4	11830.0	18635.6	24908.5	28528.7	28497.1	25921.8	19085.7
72.5°	4552.0	4503.1	4781.1	5869.7	8544.9	14823.9	21266.9	25873.9	25926.8	23188.5	16620.3
75°	2416.5	2510.2	2943.0	3593.7	4844.2	9529.6	16955.3	21413.6	21395.3	19390.1	13137.6
77.5°	1287.2	1285.1	1582.5	1860.5	2371.7	4378.8	11183.4	16148.8	16238.4	15023.5	9020.4
80°	618.1	641.6	659.9	756.6	1182.3	2023.4	4678.2	9364.6	9975.6	8960.3	4285.2
82.5°	494.9	496.9	499.0	477.6	488.8	823.8	1802.5	2709.8	2807.6	2256.6	1381.9
85°	366.6	344.2	341.1	289.2	326.9	494.9	909.4	1156.8	1099.8	1070.3	780.0
87.5°	147.7	138.5	134.4	126.3	126.3	186.4	320.8	418.5	417.5	380.9	261.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510799
 CATALOG NUMBER: CST-CA8-330-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9	7714.9
2.5°	7746.5	7783.1	7868.7	7942.0	7969.5	8036.7	8099.8	8136.5	8162.0	8177.2	8246.5
5°	7826.9	7900.3	8036.7	8139.6	8239.4	8363.6	8444.0	8495.0	8523.5	8539.8	8589.7
7.5°	7950.2	8024.5	8169.1	8326.9	8418.6	8520.4	8572.4	8609.0	8627.3	8622.3	8662.0
10°	8060.1	8133.5	8278.1	8399.2	8451.2	8509.2	8536.7	8544.9	8545.9	8550.0	8589.7
12.5°	8209.8	8254.6	8332.0	8411.5	8400.3	8402.3	8425.7	8415.5	8392.1	8388.0	8414.5
15°	8370.7	8371.7	8377.9	8360.5	8290.3	8259.7	8227.1	8199.6	8135.5	8131.4	8173.2
17.5°	8572.4	8524.5	8413.5	8295.4	8128.4	8013.3	7897.2	7849.3	7770.9	7755.7	7776.0
20°	8832.0	8732.2	8462.4	8169.1	7856.5	7650.8	7510.2	7368.7	7259.7	7233.2	7252.6
22.5°	9204.7	9008.2	8524.5	8034.7	7551.0	7199.6	6926.7	6756.7	6573.4	6479.7	6488.8
25°	9654.8	9347.3	8632.4	7864.6	7191.5	6684.4	6241.4	5900.2	5693.5	5556.0	5592.7
27.5°	10244.5	9821.9	8761.8	7696.6	6744.4	6025.5	5382.9	4920.6	4709.8	4644.6	4601.9
30°	10927.8	10395.2	8898.2	7448.1	6261.8	5209.8	4387.0	4002.1	3760.7	3722.0	3689.4
32.5°	11842.2	11117.2	9153.8	7178.3	5685.4	4394.1	3501.0	3058.1	3003.1	2971.5	2964.4
35°	13021.5	12063.2	9421.7	6827.9	4933.8	3437.9	2648.7	2409.4	2382.9	2417.5	2420.6
37.5°	14273.0	13089.7	9742.4	6432.8	4069.3	2565.2	2026.5	1860.5	1890.0	1998.0	2022.4
40°	15120.3	13765.9	10033.7	5896.2	3001.0	1863.6	1474.6	1438.9	1601.8	1740.3	1768.9
42.5°	15932.9	14278.1	10151.8	5186.4	2140.5	1326.9	1190.4	1312.6	1540.7	1692.5	1712.8
45°	16626.4	14873.8	9854.4	4335.1	1451.1	1109.0	1140.5	1309.6	1563.1	1731.2	1746.4
47.5°	17286.3	15360.6	9448.1	3415.5	1144.6	1067.2	1139.5	1337.1	1613.0	1771.9	1781.1
50°	17916.6	15731.3	8754.6	2598.8	1072.3	1047.9	1148.7	1379.8	1640.5	1740.3	1736.3
52.5°	18384.0	15922.7	8016.3	2097.8	1043.8	1032.6	1173.1	1433.8	1645.6	1705.7	1701.6
55°	18727.2	15886.1	7531.6	1717.9	1020.4	1026.5	1212.8	1474.6	1694.5	1785.1	1782.1
57.5°	18758.8	15720.1	6980.7	1451.1	991.9	1025.5	1255.6	1531.6	1938.9	2105.9	2055.0
60°	18721.1	15445.1	6430.8	1273.9	960.3	1031.6	1300.4	1702.7	2291.3	2422.6	2387.0
62.5°	18535.8	14932.9	5607.0	1156.8	932.8	1054.0	1334.0	1838.1	2273.9	2289.2	2238.3
65°	17963.5	14247.5	4525.5	1038.7	905.3	1069.3	1361.5	1873.7	2088.6	2039.7	2014.3
67.5°	16831.1	12717.0	3490.9	930.8	869.7	1066.2	1443.0	1822.8	2018.3	1982.7	1950.1
70°	15222.1	10977.7	2423.6	819.8	809.6	1046.9	1422.6	1840.1	1984.7	1929.7	1886.0
72.5°	12717.0	8612.1	1541.8	729.1	720.0	1001.0	1371.7	1828.9	1962.3	1937.9	1877.8
75°	9575.4	6011.2	979.6	630.4	640.5	917.5	1290.2	1768.9	1951.1	1874.8	1759.7
77.5°	6028.6	2967.4	761.7	535.6	550.9	791.2	1115.1	1544.8	1872.7	1826.9	1679.2
80°	2280.1	1204.7	595.7	434.8	448.1	615.1	914.5	1270.9	1724.0	1799.4	1736.3
82.5°	1049.9	753.6	447.0	349.3	354.4	448.1	682.3	940.9	1459.3	1651.7	1809.6
85°	613.0	493.9	298.4	233.2	242.4	264.8	383.9	574.3	946.0	1259.7	1409.4
87.5°	208.8	172.1	116.1	98.8	95.7	109.0	92.7	188.4	281.1	494.9	565.2
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)