

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: P721869

Luminaire Tested: **CST-CA8-400-750-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-750-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61398 lumens
Efficiency: N/A
Efficacy: 153.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

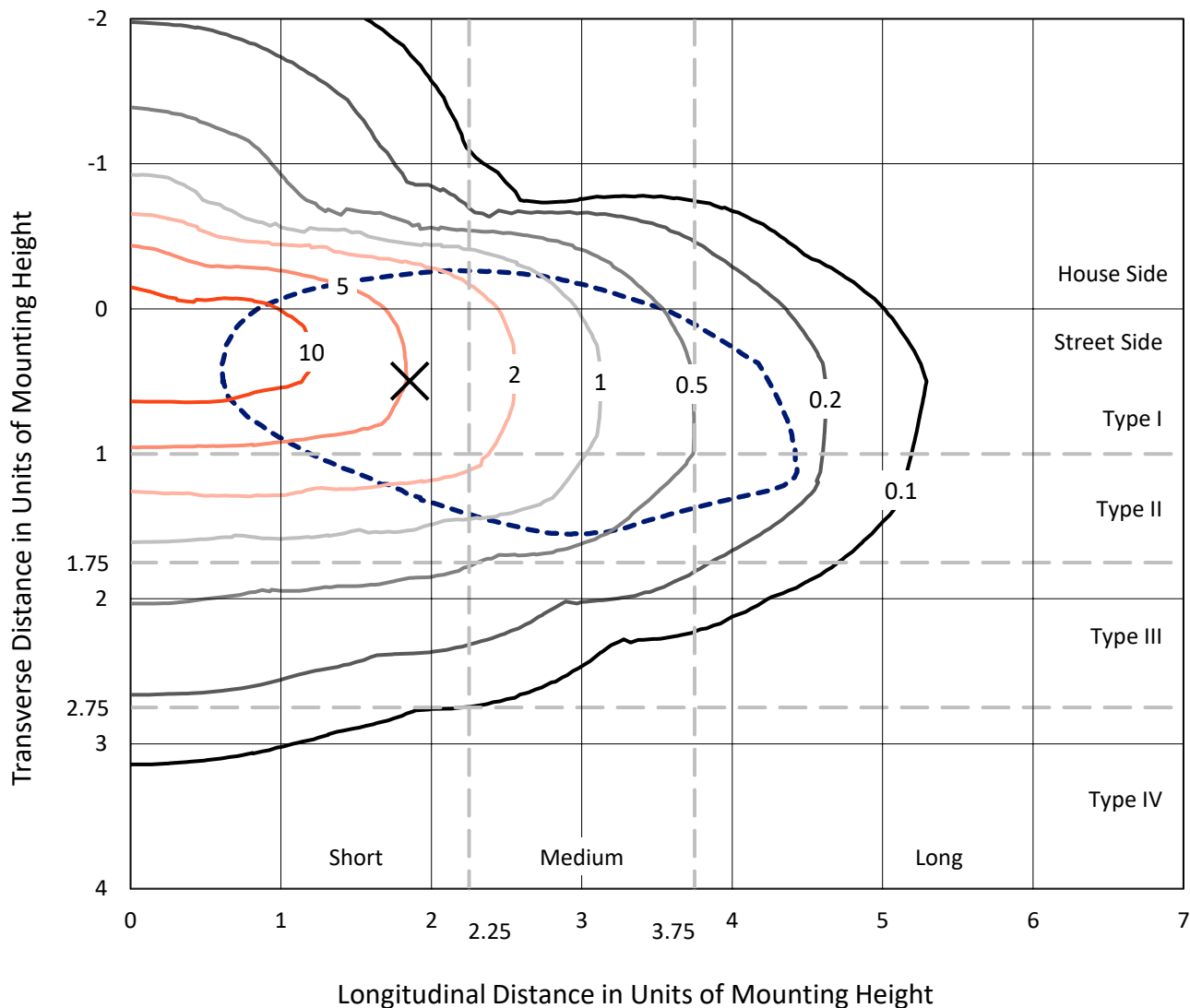
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P721869
 CATALOG NUMBER: CST-CA8-400-750-U-T2

Iso-Footcandle Lines of Horizontal Illumination

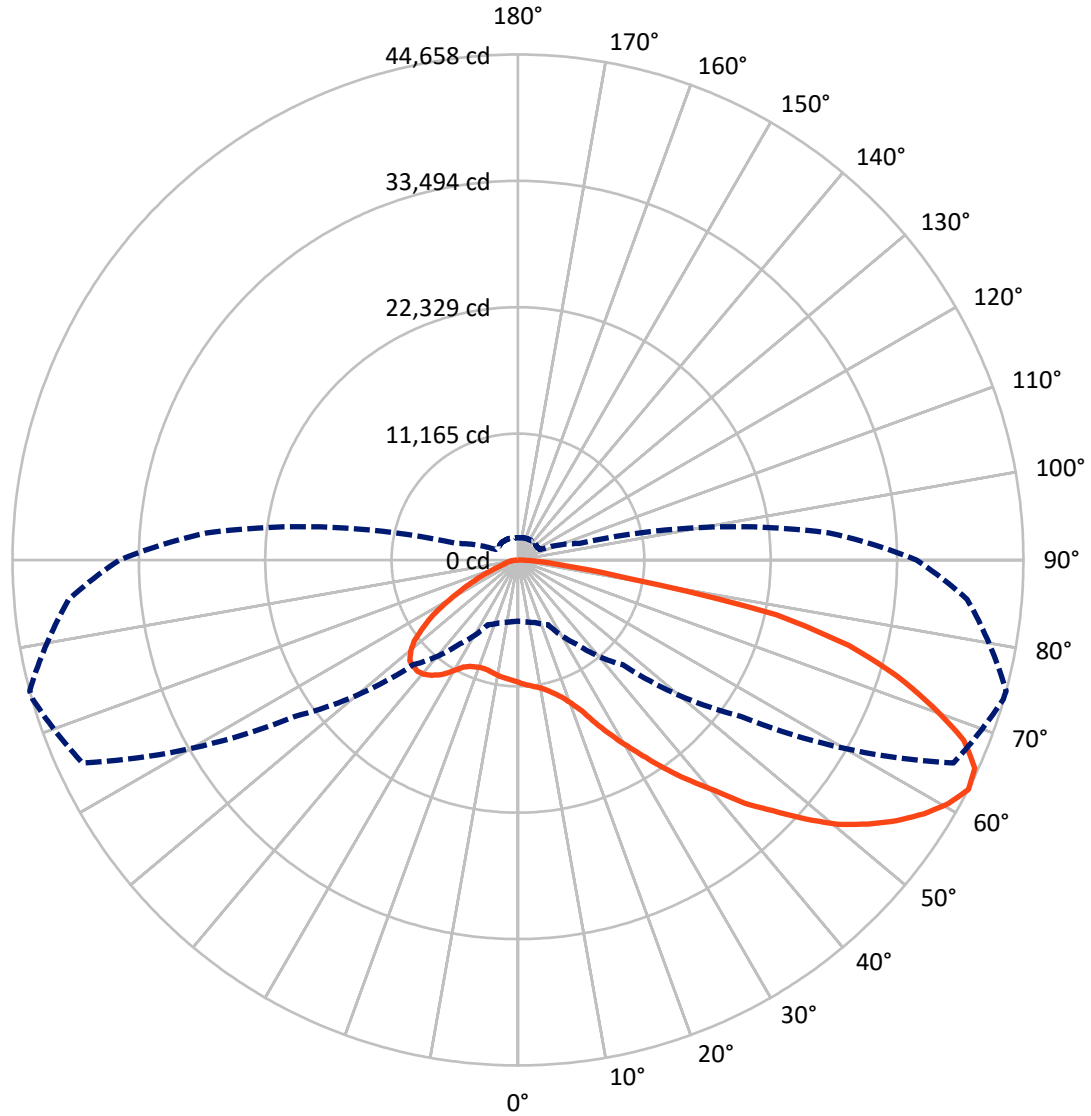
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.1 fc
 Type II - Short - N/A

REPORT NUMBER: P721869
CATALOG NUMBER: CST-CA8-400-750-U-T2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P721869
 CATALOG NUMBER: CST-CA8-400-750-U-T2

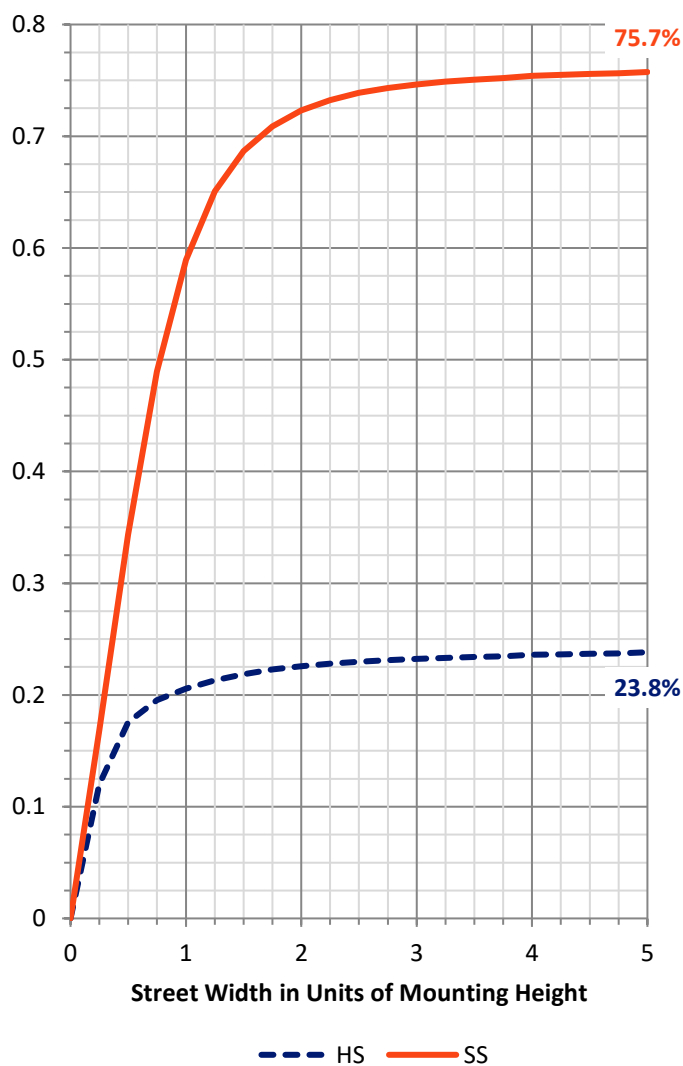
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14875.6	0.0	14875.6
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	46522.4	0.0	46522.4
	% Fixture	75.8	0.0	75.8
Total	Lumens	61398.0	0.0	61398.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1041.2	1.7
10°-20°	3160.0	5.1
20°-30°	5450.2	8.9
30°-40°	8036.5	13.1
40°-50°	10593.8	17.3
50°-60°	12468.0	20.3
60°-70°	12404.4	20.2
70°-80°	7233.9	11.8
80°-90°	1010.1	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°	61398.0	100.0
0°-180°	61398.0	100.0

Coefficient of Utilization

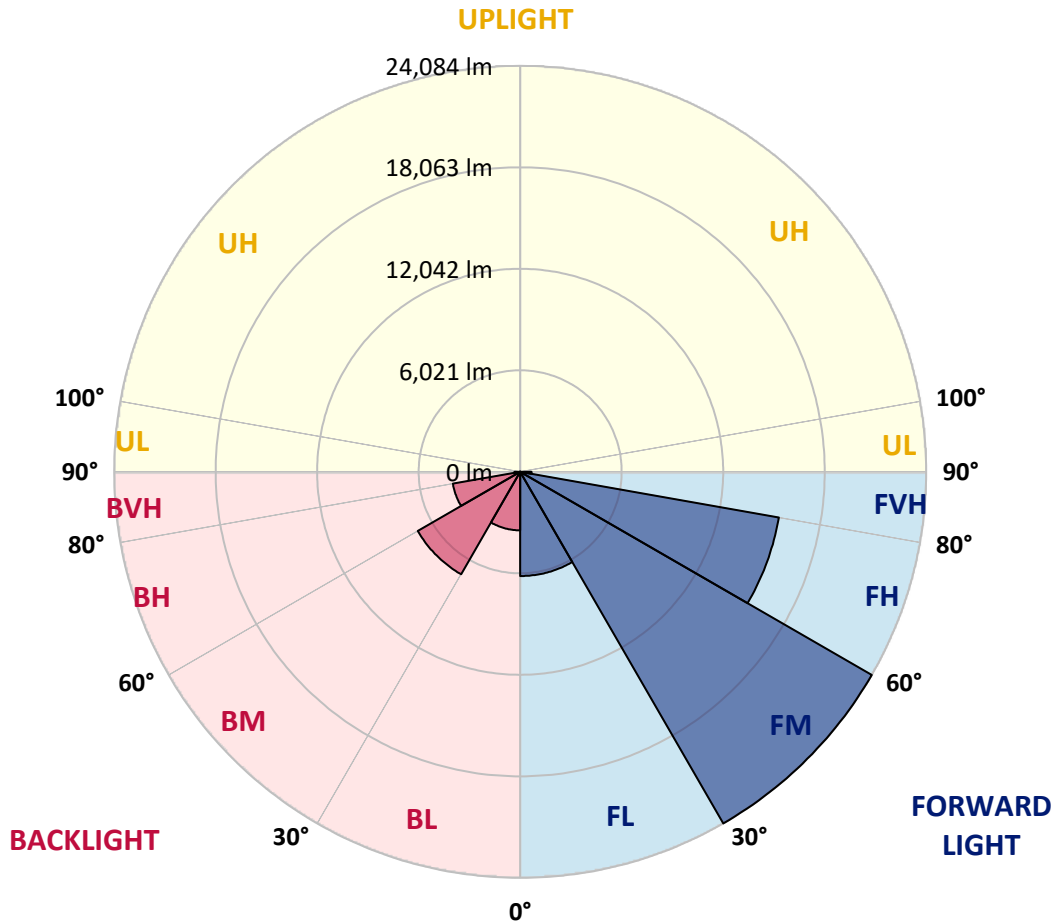


REPORT NUMBER: P721869
 CATALOG NUMBER: CST-CA8-400-750-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6182.5	10.1			
FM (30°-60°)	24083.9	39.2			
FH (60°-80°)	15585.6	25.4			G5
FVH (80°-90°)	670.3	1.1			G4/750
BL (0°-30°)	3468.9	5.6	B4/5000		
BM (30°-60°)	7014.3	11.4	B4/8500		
BH (60°-80°)	4052.6	6.6	B4/5000		G4/5000
BVH (80°-90°)	339.8	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





REPORT NUMBER: P721869

CATALOG NUMBER: CST-CA8-400-750-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1
2.5°	11415.7	11369.0	11375.3	11342.4	11293.1	11256.5	11160.5	11056.8	10994.9	10989.9	10901.4
5°	11989.4	12004.6	12008.4	11903.5	11799.9	11682.3	11535.8	11336.1	11173.1	11147.8	10976.0
7.5°	12512.6	12511.3	12503.7	12445.6	12397.6	12223.2	11930.0	11616.6	11351.3	11327.3	11048.0
10°	13048.3	13044.5	12968.7	12871.4	12762.8	12602.3	12350.8	11975.5	11545.9	11514.3	11115.0
12.5°	13632.1	13590.4	13542.4	13424.9	13296.0	13018.0	12753.9	12345.7	11897.2	11840.3	11233.7
15°	14113.6	14070.6	14003.6	13924.0	13788.8	13576.5	13296.0	12812.0	12330.6	12275.0	11500.4
17.5°	14590.0	14569.8	14521.7	14437.1	14333.5	14150.2	13892.4	13481.8	12851.2	12783.0	11943.9
20°	14980.4	14932.4	14897.0	14936.2	14945.1	14809.8	14668.3	14323.3	13628.3	13523.5	12488.5
22.5°	15202.8	15192.7	15386.1	15530.1	15588.2	15618.6	15574.3	15296.3	14667.1	14483.8	13246.7
25°	15413.9	15397.4	15660.3	16020.4	16362.9	16537.2	16654.8	16691.4	16113.9	15948.4	14466.1
27.5°	15420.2	15465.7	15847.3	16451.3	16973.2	17505.2	18068.8	18133.2	17626.5	17495.1	15853.6
30°	15454.3	15474.5	15852.3	16546.1	17632.8	18485.8	19219.9	19582.6	19145.4	19084.7	17381.4
32.5°	15020.9	15047.4	15635.0	16711.6	18130.7	19500.5	20474.7	21013.0	20904.4	20827.3	19011.4
35°	14569.8	14592.5	15274.9	16476.6	18500.9	20421.7	21608.2	22665.9	22864.3	22806.2	20829.8
37.5°	13862.1	13937.9	14653.2	16196.1	18565.4	21099.0	22689.9	24312.4	24911.4	24737.0	22753.1
40°	13093.8	13149.4	13982.2	15608.5	18493.4	21543.8	23752.6	26134.6	26859.9	26766.4	24662.4
42.5°	12123.3	12272.5	13106.5	14857.9	18123.1	21820.5	24735.7	28200.6	29254.5	29379.6	26416.4
45°	11305.8	11302.0	12076.6	13771.1	17452.1	21886.2	25640.5	30289.4	31831.1	31596.0	28735.1
47.5°	10344.1	10383.3	11192.0	12689.5	16462.7	21677.7	26345.6	32758.6	34319.2	34191.5	30636.9
50°	8118.9	8400.7	9932.2	11759.4	15124.5	21096.4	26933.2	35163.3	36653.1	36711.2	32365.6
52.5°	6999.3	7108.0	7953.3	10823.1	13936.7	20120.9	27577.7	37868.7	38908.7	38760.9	34328.0
55°	6550.7	6608.8	7014.5	9141.2	12788.0	18610.9	27887.2	40339.1	40667.7	40643.7	35942.9
57.5°	6225.9	6270.2	6558.3	7628.6	11526.9	16672.4	27625.7	41946.5	42457.0	42300.3	37466.9
60°	5757.1	5792.5	6222.2	6874.2	10229.2	14715.1	26017.1	42675.6	43754.8	43696.6	38813.9
62.5°	5404.6	5465.2	5705.3	6316.9	9120.9	13102.7	24100.1	42448.2	44606.4	44658.3	39842.5
65°	5031.8	5086.1	5289.6	5824.1	8116.4	12042.5	22032.8	41308.3	44214.7	44352.5	40009.3
67.5°	4571.8	4613.5	4854.9	5317.4	6942.4	10982.3	19701.4	39292.8	42041.3	42484.8	38348.9
70°	3993.1	4008.3	4304.0	4618.6	5764.7	9383.8	15665.3	35993.5	38896.1	38904.9	35213.8
72.5°	3178.1	3190.7	3269.0	3507.9	4330.5	7426.4	11514.3	30074.6	35072.3	35007.8	31296.5
75°	2160.8	2272.0	2543.7	2771.2	3123.7	5215.0	7161.0	20262.4	29714.5	30219.9	25707.5
77.5°	1707.2	1717.3	1829.7	2038.2	2342.8	3895.8	4013.3	11211.0	22152.8	23354.6	20206.8
80°	1190.3	1208.0	1147.4	1197.9	1633.9	2666.3	2345.3	4878.9	9238.5	9864.0	12132.2
82.5°	567.4	587.6	674.8	626.8	812.5	1133.5	1238.4	2521.0	3990.6	4095.5	4723.5
85°	374.0	374.0	375.3	355.1	473.9	494.1	562.3	1075.4	1948.5	2014.2	2002.9
87.5°	120.0	132.7	128.9	150.4	182.0	164.3	171.9	337.4	668.5	662.1	553.5
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: P721869

CATALOG NUMBER: CST-CA8-400-750-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1	10823.1
2.5°	10838.2	10786.4	10665.1	10559.0	10454.1	10374.5	10306.2	10215.3	10172.3	10133.1	10215.3
5°	10869.8	10777.6	10560.2	10342.9	10143.2	9996.6	9906.9	9841.2	9781.8	9781.8	9809.6
7.5°	10906.5	10781.4	10470.5	10162.2	9862.7	9695.9	9568.3	9484.9	9436.9	9439.4	9498.8
10°	10930.5	10738.4	10368.2	9952.4	9626.4	9358.5	9233.4	9113.4	9022.4	8968.0	9028.7
12.5°	10958.3	10724.5	10230.4	9761.6	9364.8	9061.6	8801.2	8711.5	8623.1	8554.8	8587.7
15°	11130.1	10777.6	10115.4	9519.0	9059.0	8681.2	8340.0	8175.7	8150.5	8103.7	8115.1
17.5°	11410.7	10920.4	10040.9	9222.0	8691.3	8245.2	7813.1	7600.8	7550.2	7526.2	7538.9
20°	11828.9	11192.0	10063.6	9013.5	8276.8	7777.7	7219.2	6970.2	6802.2	6812.3	6861.6
22.5°	12468.3	11630.5	10187.5	8784.8	7828.2	7173.7	6610.1	6271.4	6102.1	6065.5	6121.1
25°	13486.8	12336.9	10323.9	8566.2	7394.8	6521.6	5897.4	5530.9	5313.6	5299.7	5361.6
27.5°	14792.2	13419.8	10620.9	8376.7	6856.5	5738.2	5117.7	4804.4	4573.1	4545.3	4525.1
30°	16127.8	14622.8	11157.9	8088.6	6228.5	4929.5	4389.9	4144.7	3885.7	3780.8	3803.6
32.5°	17543.1	15743.7	11787.2	7886.4	5525.9	4218.0	3749.2	3515.4	3277.9	3126.2	3090.9
35°	18968.5	16858.2	12316.7	7584.4	4860.0	3653.2	3204.6	2963.2	2756.0	2632.2	2623.3
37.5°	20636.5	18018.2	12741.3	7263.4	4168.7	3210.9	2671.3	2532.3	2432.5	2323.8	2335.2
40°	22307.0	19370.3	13081.2	6732.7	3595.1	2735.8	2273.3	2301.1	2322.6	2231.6	2224.0
42.5°	23694.5	20506.3	13236.6	6045.2	3087.1	2322.6	2097.6	2224.0	2317.5	2258.1	2250.5
45°	25103.4	21462.9	13176.0	5192.3	2665.0	2125.4	2083.7	2212.6	2332.7	2318.8	2312.5
47.5°	26635.0	22716.4	13071.1	4220.6	2363.0	2106.5	2114.1	2174.7	2326.4	2351.6	2341.5
50°	28507.7	23870.1	12450.6	3286.7	2216.4	2136.8	2182.3	2150.7	2279.6	2331.4	2340.3
52.5°	30371.6	24758.5	11620.4	2848.2	2158.3	2165.9	2277.1	2169.7	2226.5	2272.0	2313.7
55°	31809.6	25663.2	10277.2	2584.1	2139.3	2179.8	2303.6	2210.1	2208.8	2208.8	2222.7
57.5°	33281.7	26875.1	8933.9	2413.5	2106.5	2194.9	2272.0	2217.7	2200.0	2174.7	2158.3
60°	34306.5	27323.7	7207.8	2301.1	2072.4	2173.5	2183.6	2176.0	2121.6	2097.6	2078.7
62.5°	35216.3	27567.5	5611.8	2172.2	2025.6	2122.9	2069.8	2053.4	2021.8	1963.7	1973.8
65°	34972.5	27044.4	4276.2	2026.9	1992.8	2062.3	1970.0	1930.8	1933.4	1872.7	1892.9
67.5°	33403.0	24697.8	3070.6	1804.5	1903.0	1942.2	1856.3	1827.2	1784.3	1753.9	1781.7
70°	30232.6	21893.8	2071.1	1497.4	1698.3	1783.0	1726.1	1675.6	1608.6	1588.4	1618.7
72.5°	25445.9	18276.0	1429.2	1204.2	1465.8	1575.8	1554.3	1502.5	1454.4	1503.7	1563.1
75°	20904.4	13520.9	1166.3	986.9	1127.2	1312.9	1376.1	1391.3	1535.3	2015.5	2064.8
77.5°	15047.4	8381.7	1048.8	802.4	899.7	1050.1	1176.4	1228.3	1875.2	1795.6	1791.8
80°	8773.4	4885.2	799.9	633.1	727.9	769.6	919.9	1441.8	1617.5	1387.5	1353.4
82.5°	4003.2	2155.8	557.3	506.7	505.5	509.2	626.8	1387.5	1240.9	1093.0	1052.6
85°	1472.1	758.2	338.7	293.2	336.1	291.9	410.7	1017.2	719.0	707.6	590.1
87.5°	362.7	155.4	115.0	96.0	78.3	74.6	125.1	334.9	175.6	160.5	154.2
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)