

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: P510819

Luminaire Tested: **CST-CA8-480-722-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510819
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-CA8-480-722-U-T3
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: 58037 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

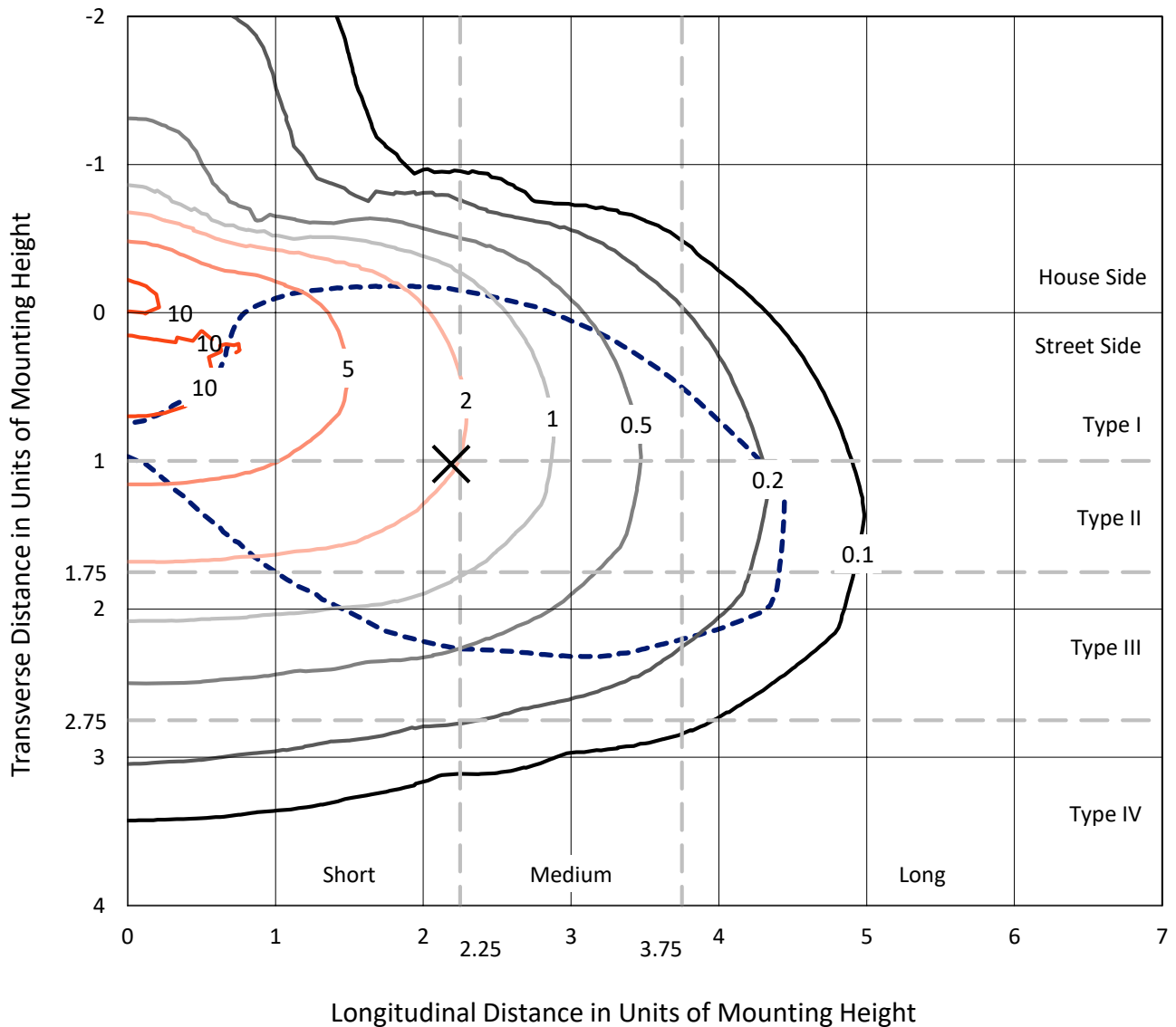
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

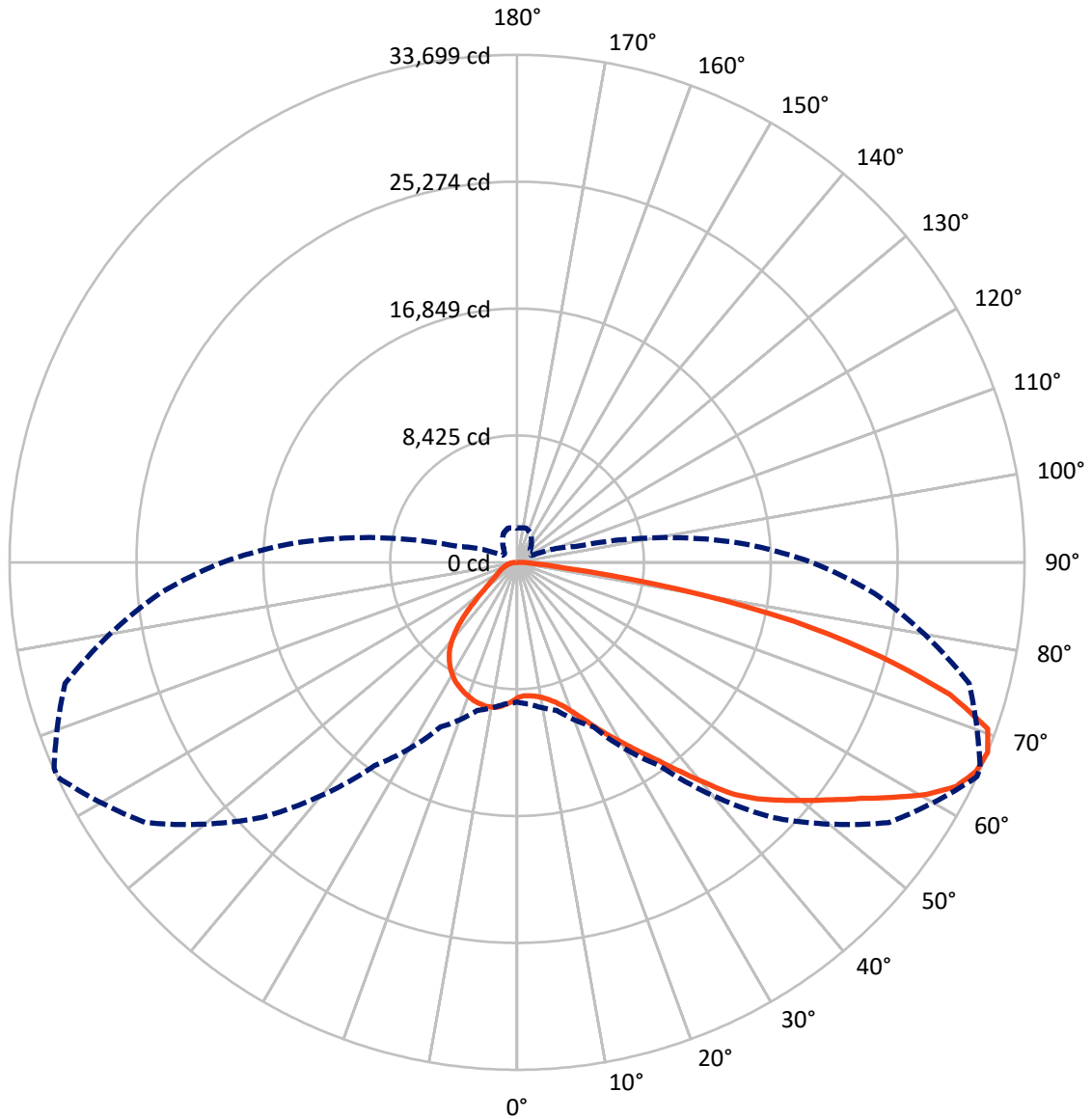
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.1 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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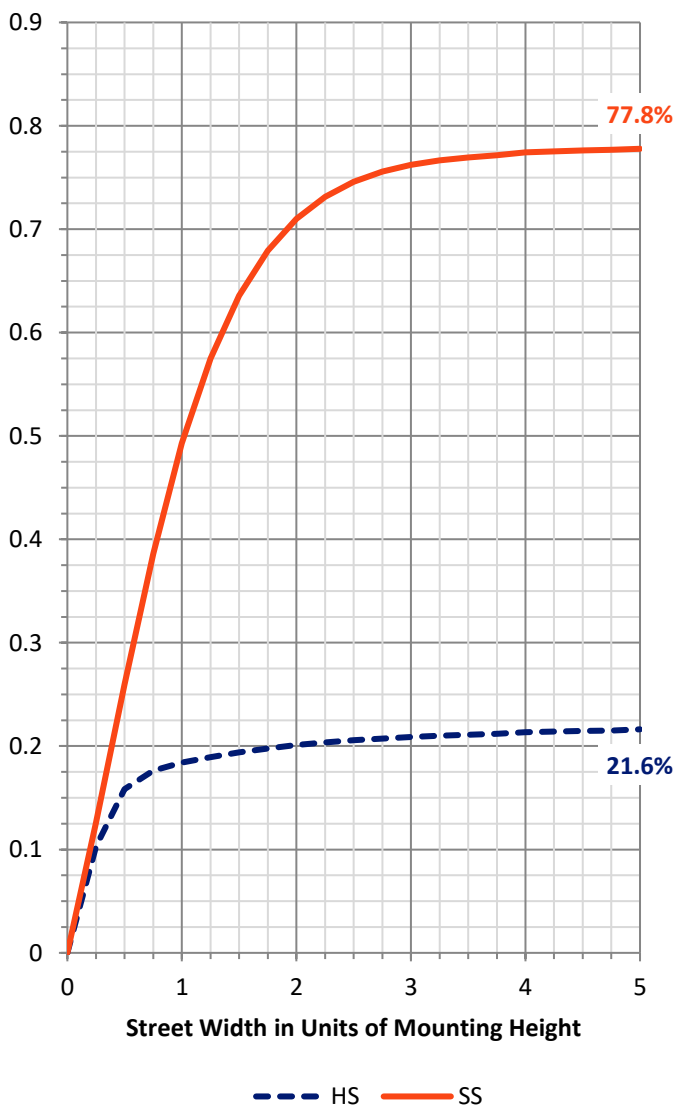
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12819.6	0.0	12819.6
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	45217.4	0.0	45217.4
	% Fixture	77.9	0.0	77.9
Total	Lumens	58037.0	0.0	58037.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	893.2	1.5
10°-20°	2790.6	4.8
20°-30°	4830.9	8.3
30°-40°	7098.4	12.2
40°-50°	9594.5	16.5
50°-60°	11798.3	20.3
60°-70°	12642.6	21.8
70°-80°	7456.5	12.8
80°-90°	932.0	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°	58037.0	100.0
0°-180°	58037.0	100.0

Coefficient of Utilization

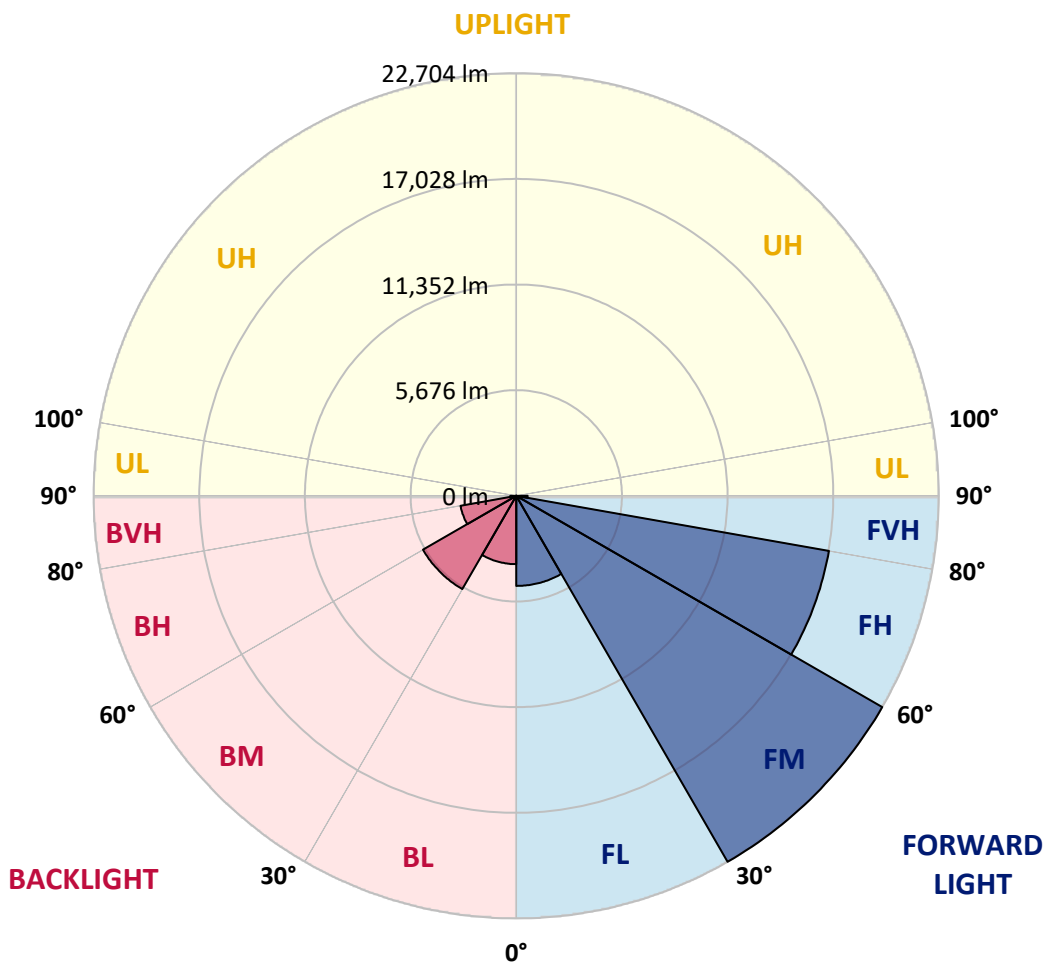


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4842.7	8.3			
FM (30°-60°)	22704.5	39.1			
FH (60°-80°)	17059.0	29.4			G5
FVH (80°-90°)	611.2	1.1			G4/750
BL (0°-30°)	3671.9	6.3	B4/5000		
BM (30°-60°)	5786.7	10.0	B4/8500		
BH (60°-80°)	3040.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	320.9	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°	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5
2.5°	8795.3	8778.7	8771.6	8794.1	8810.7	8829.6	8856.8	8882.9	8886.4	8920.7	8965.7
5°	8901.8	8887.6	8872.2	8868.7	8862.8	8861.6	8868.7	8898.3	8905.4	8938.5	9035.5
7.5°	9138.5	9124.3	9095.9	9085.2	9053.3	8996.5	8969.2	8984.6	8988.2	9028.4	9149.1
10°	9524.2	9480.4	9446.1	9410.6	9310.0	9220.1	9153.8	9125.4	9119.5	9158.6	9298.2
12.5°	9984.5	9947.8	9910.0	9816.5	9688.7	9526.6	9409.4	9344.3	9339.6	9372.7	9478.1
15°	10470.8	10470.8	10444.8	10333.6	10208.1	9939.5	9758.5	9649.6	9656.7	9682.8	9731.3
17.5°	11099.2	11047.1	11035.3	10908.6	10769.0	10524.1	10236.5	10062.6	10070.9	10082.7	10046.0
20°	11738.1	11722.7	11705.0	11621.0	11494.4	11179.6	10856.6	10628.2	10629.4	10586.8	10423.5
22.5°	12583.0	12532.1	12545.1	12450.5	12278.9	11955.8	11584.3	11313.3	11331.1	11269.5	10973.7
25°	13421.9	13371.0	13343.8	13279.9	13132.0	12825.6	12384.2	12135.7	12114.4	12003.2	11573.6
27.5°	14259.7	14230.1	14252.6	14175.7	14055.0	13713.0	13308.3	13032.6	13046.8	12969.9	12329.8
30°	15127.0	15093.9	15192.1	15067.9	14993.3	14660.8	14272.7	13948.5	13960.3	13988.7	13270.5
32.5°	15781.4	15820.4	15992.0	15977.8	15963.6	15593.2	15185.0	15005.2	15022.9	15122.3	14387.5
35°	16413.3	16416.8	16658.2	16840.4	16917.3	16607.3	16183.7	16177.8	16293.7	16596.7	15944.7
37.5°	16937.4	16925.6	17247.5	17530.3	17740.9	17500.7	17267.6	17630.8	17736.2	18364.5	17512.5
40°	17223.8	17248.6	17662.8	18015.4	18429.6	18316.0	18340.8	19269.7	19528.8	20079.0	18685.1
42.5°	17022.6	17098.4	17743.3	18462.7	19087.5	19238.9	19738.3	21039.9	21149.9	21249.3	19838.8
45°	16685.4	16764.7	17479.4	18641.4	19630.6	20270.7	21128.6	22401.8	22522.5	22411.3	20798.5
47.5°	16334.0	16415.6	17212.0	18569.2	20080.2	21307.3	22365.1	23606.4	23760.2	23415.9	21721.4
50°	15887.9	16014.5	16885.4	18416.5	20444.7	22425.5	23535.4	24846.5	24917.5	24420.5	22420.8
52.5°	15338.8	15478.5	16420.4	18155.0	20729.9	23206.5	24719.9	26191.9	26184.8	25594.3	23220.7
55°	14761.4	14888.0	15858.3	17743.3	20889.6	23807.6	25666.5	27674.5	27759.7	27265.1	23944.8
57.5°	14021.8	14136.6	15194.5	17189.5	20723.9	24317.6	27200.0	29436.4	29479.0	28428.3	24521.1
60°	13042.1	13211.3	14273.9	16485.4	20248.3	24908.0	28889.7	31289.4	31341.5	29572.5	24891.4
62.5°	11966.5	12033.9	13116.6	15401.6	19556.0	25363.6	30061.2	32738.9	32663.2	30467.0	25002.7
65°	10655.4	10708.7	11645.8	14007.6	18269.8	25113.9	30481.2	33484.4	33390.9	31029.1	24660.7
67.5°	9282.8	9447.3	10183.3	12074.2	16474.8	23961.4	30126.3	33698.6	33651.3	31071.7	23844.2
70°	7500.8	7558.8	8223.8	9836.6	13746.1	21654.0	28943.0	33149.5	33112.9	30120.3	22177.0
72.5°	5289.3	5232.5	5555.5	6820.4	9928.9	17225.0	24711.6	30064.7	30126.3	26944.4	19312.3
75°	2807.9	2916.8	3419.7	4175.8	5628.9	11073.1	19701.6	24882.0	24860.7	22530.8	15265.5
77.5°	1495.7	1493.3	1838.8	2161.8	2755.9	5088.1	12994.8	18764.4	18868.6	17456.9	10481.5
80°	718.2	745.5	766.8	879.2	1373.8	2351.2	5436.0	10881.4	11591.4	10411.7	4979.2
82.5°	575.1	577.4	579.8	555.0	568.0	957.3	2094.4	3148.7	3262.3	2622.1	1605.7
85°	426.0	399.9	396.4	336.1	379.8	575.1	1056.7	1344.2	1277.9	1243.6	906.4
87.5°	171.6	160.9	156.2	146.7	146.7	216.5	372.7	486.3	485.1	442.5	304.1
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°	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5	8964.5
2.5°	9001.2	9043.8	9143.2	9228.4	9260.3	9338.4	9411.8	9454.4	9484.0	9501.7	9582.2
5°	9094.7	9179.9	9338.4	9457.9	9573.9	9718.3	9811.7	9870.9	9904.0	9923.0	9981.0
7.5°	9237.9	9324.2	9492.3	9675.7	9782.2	9900.5	9960.8	10003.4	10024.7	10018.8	10065.0
10°	9365.6	9450.8	9618.9	9759.7	9820.0	9887.5	9919.4	9928.9	9930.1	9934.8	9981.0
12.5°	9539.6	9591.7	9681.6	9773.9	9760.9	9763.2	9790.4	9778.6	9751.4	9746.7	9777.4
15°	9726.5	9727.7	9734.8	9714.7	9633.1	9597.6	9559.7	9527.8	9453.2	9448.5	9497.0
17.5°	9960.8	9905.2	9776.2	9639.0	9444.9	9311.2	9176.3	9120.7	9029.6	9011.8	9035.5
20°	10262.6	10146.6	9833.0	9492.3	9129.0	8890.0	8726.7	8562.2	8435.6	8404.8	8427.3
22.5°	10695.7	10467.3	9905.2	9336.1	8774.0	8365.8	8048.7	7851.1	7638.1	7529.2	7539.8
25°	11218.7	10861.3	10030.7	9138.5	8356.3	7767.0	7252.3	6855.9	6615.7	6456.0	6498.6
27.5°	11903.8	11412.7	10180.9	8943.2	7836.9	7001.5	6254.8	5717.6	5472.7	5396.9	5347.2
30°	12697.8	12078.9	10339.5	8654.5	7276.0	6053.7	5097.6	4650.3	4369.8	4324.9	4287.0
32.5°	13760.3	12917.8	10636.5	8340.9	6606.2	5105.8	4068.1	3553.4	3489.5	3452.8	3444.5
35°	15130.6	14017.1	10947.7	7933.9	5733.0	3994.7	3077.7	2799.6	2768.9	2809.1	2812.7
37.5°	16584.8	15209.9	11320.4	7474.8	4728.4	2980.7	2354.7	2161.8	2196.2	2321.6	2350.0
40°	17569.3	15995.6	11658.8	6851.2	3487.1	2165.4	1713.4	1672.0	1861.3	2022.2	2055.4
42.5°	18513.6	16590.7	11796.1	6026.4	2487.3	1541.8	1383.3	1525.2	1790.3	1966.6	1990.3
45°	19319.4	17283.0	11450.6	5037.2	1686.2	1288.6	1325.3	1521.7	1816.3	2011.6	2029.3
47.5°	20086.1	17848.6	10978.5	3968.7	1330.0	1240.1	1324.1	1553.6	1874.3	2058.9	2069.6
50°	20818.6	18279.3	10172.6	3019.7	1246.0	1217.6	1334.7	1603.3	1906.3	2022.2	2017.5
52.5°	21361.7	18501.7	9314.8	2437.6	1212.9	1199.8	1363.1	1666.1	1912.2	1982.0	1977.3
55°	21760.5	18459.1	8751.5	1996.2	1185.6	1192.7	1409.3	1713.4	1969.0	2074.3	2070.7
57.5°	21797.2	18266.3	8111.4	1686.2	1152.5	1191.6	1459.0	1779.7	2253.0	2447.0	2387.9
60°	21753.4	17946.8	7472.4	1480.3	1115.8	1198.7	1511.0	1978.4	2662.4	2815.0	2773.6
62.5°	21538.0	17351.6	6515.1	1344.2	1083.9	1224.7	1550.1	2135.8	2642.3	2660.0	2600.8
65°	20873.0	16555.2	5258.5	1206.9	1051.9	1242.4	1582.0	2177.2	2426.9	2370.1	2340.5
67.5°	19557.2	14776.8	4056.3	1081.5	1010.5	1238.9	1676.7	2118.1	2345.3	2303.8	2266.0
70°	17687.6	12755.7	2816.2	952.5	940.7	1216.4	1653.0	2138.2	2306.2	2242.3	2191.4
72.5°	14776.8	10007.0	1791.5	847.2	836.6	1163.2	1593.9	2125.2	2280.2	2251.8	2182.0
75°	11126.4	6984.9	1138.3	732.4	744.3	1066.1	1499.2	2055.4	2267.2	2178.4	2044.7
77.5°	7005.0	3448.1	885.1	622.4	640.2	919.4	1295.7	1795.0	2176.0	2122.8	1951.2
80°	2649.4	1399.8	692.2	505.3	520.6	714.7	1062.6	1476.7	2003.3	2090.9	2017.5
82.5°	1220.0	875.6	519.5	405.9	411.8	520.6	792.8	1093.3	1695.6	1919.3	2102.7
85°	712.3	573.9	346.7	271.0	281.6	307.7	446.1	667.4	1099.3	1463.7	1637.7
87.5°	242.6	200.0	134.9	114.8	111.2	126.6	107.7	218.9	326.6	575.1	656.7
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)