

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: P510849

Luminaire Tested: **CST-CA8-480-740-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510849
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-CA8-480-740-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 71212 lumens
Efficiency: N/A
Efficacy: 148.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

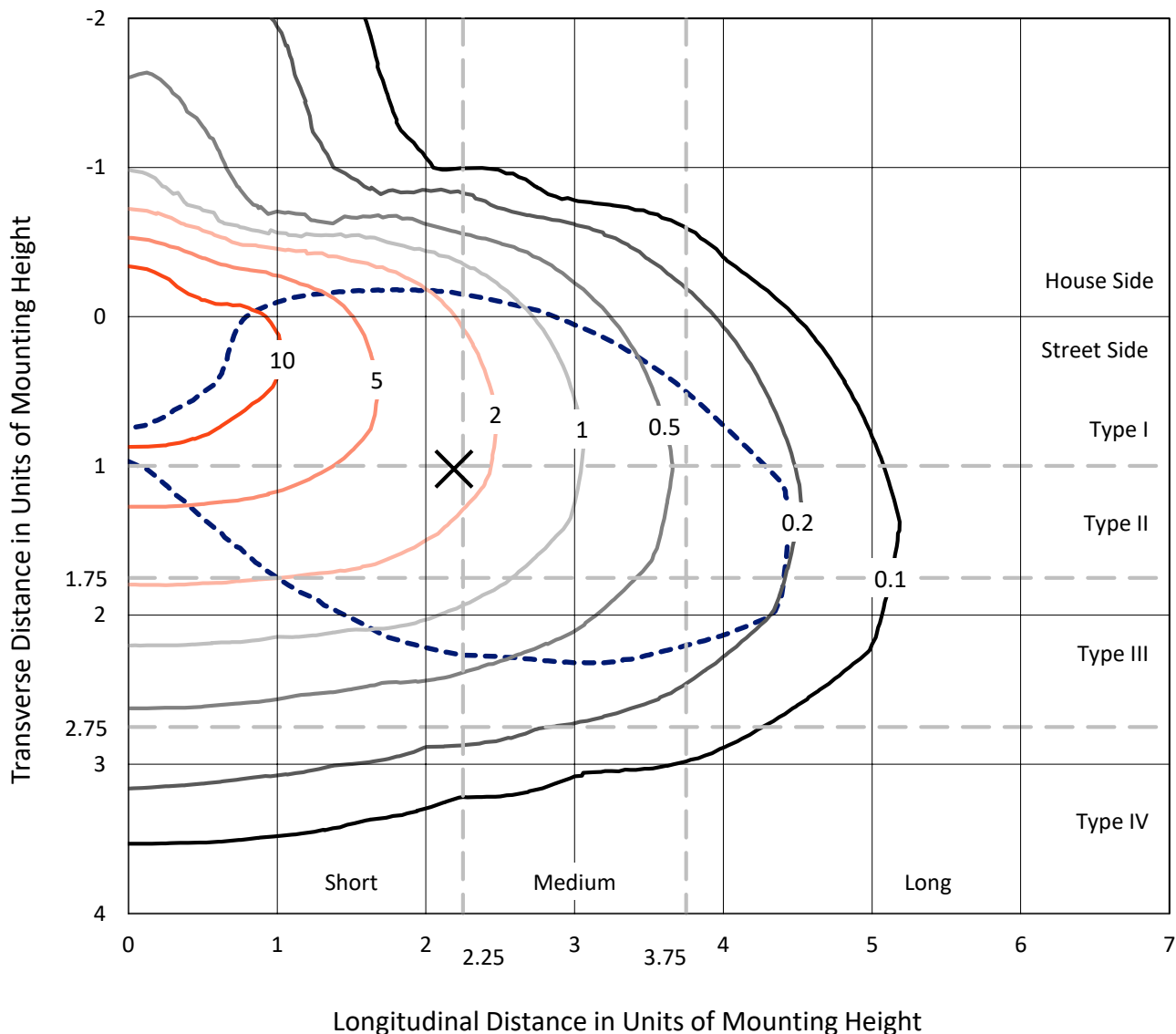
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

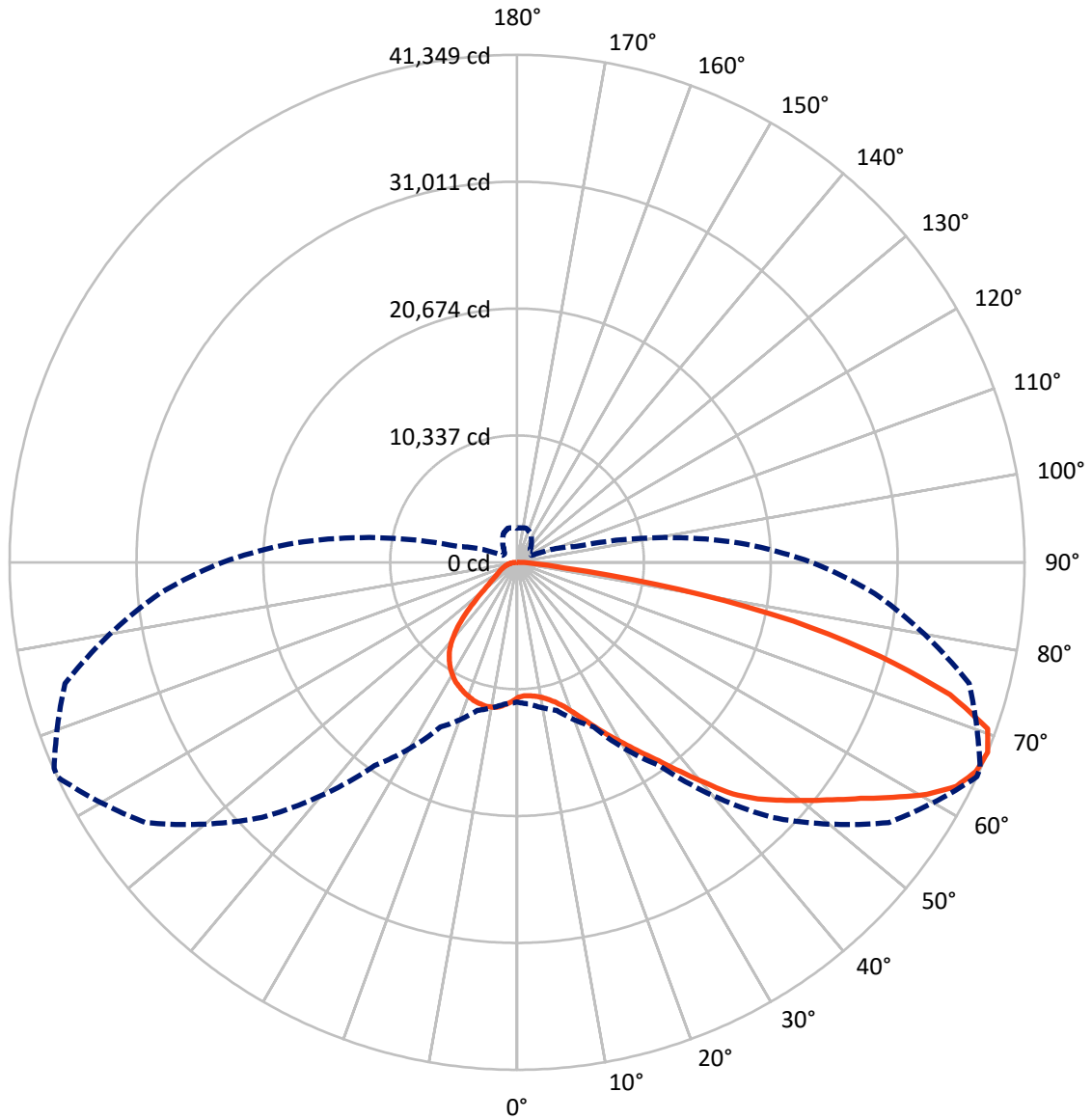
✕ Max cd
 - - - 1/2 Max cd



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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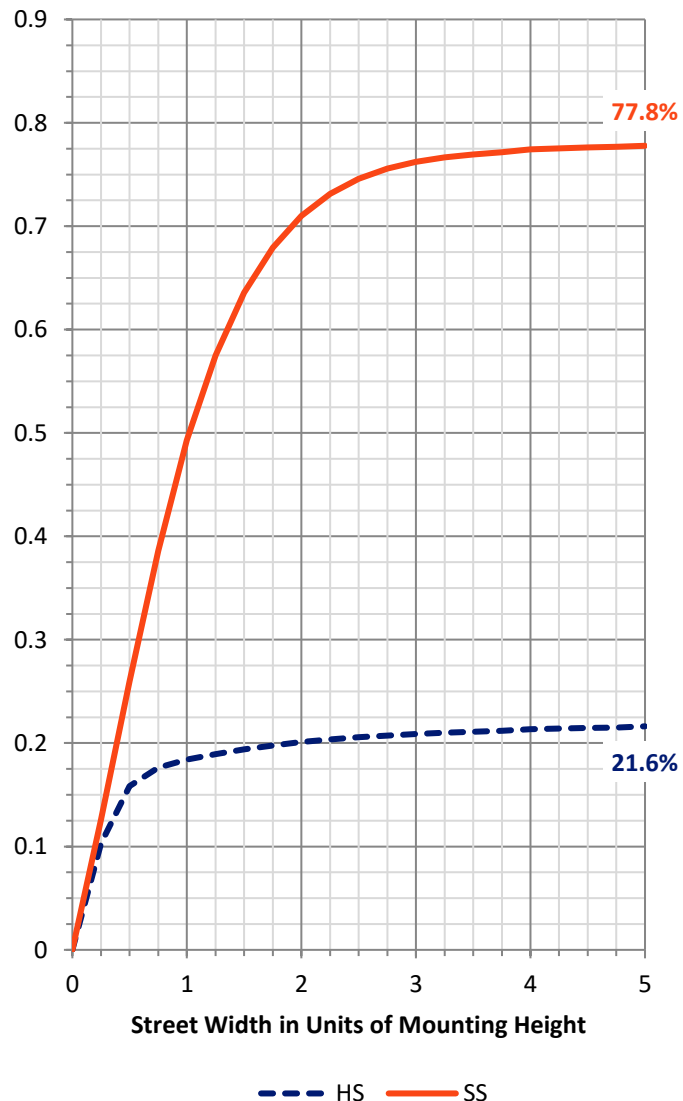
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15729.8	0.0	15729.8
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	55482.2	0.0	55482.2
	% Fixture	77.9	0.0	77.9
Total	Lumens	71212.0	0.0	71212.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1095.9	1.5
10°-20°	3424.1	4.8
20°-30°	5927.5	8.3
30°-40°	8709.9	12.2
40°-50°	11772.5	16.5
50°-60°	14476.6	20.3
60°-70°	15512.6	21.8
70°-80°	9149.2	12.8
80°-90°	1143.6	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°	71212.0	100.0
0°-180°	71212.0	100.0

Coefficient of Utilization



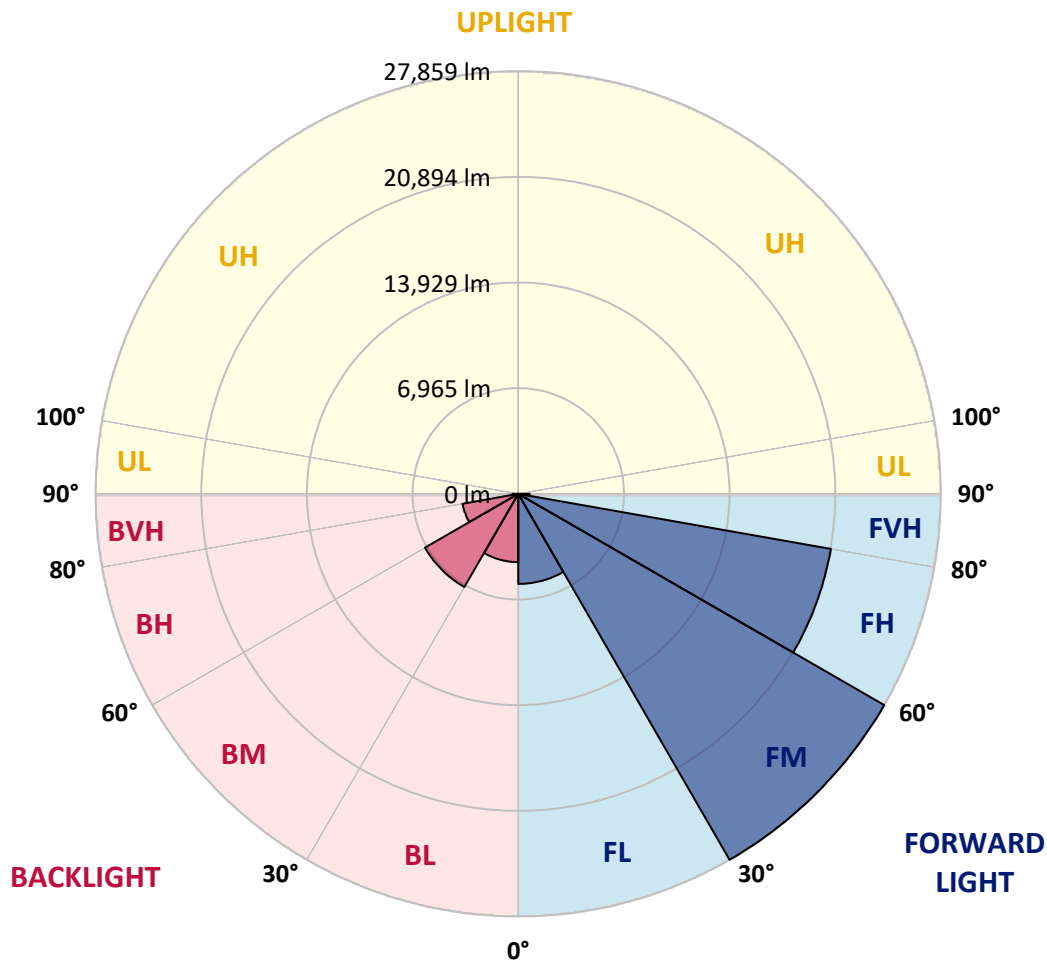
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5942.1	8.3			
FM (30°-60°)	27858.6	39.1			
FH (60°-80°)	20931.5	29.4			G5
FVH (80°-90°)	749.9	1.1			G4/750
BL (0°-30°)	4505.5	6.3	B4/5000		
BM (30°-60°)	7100.4	10.0	B4/8500		
BH (60°-80°)	3730.3	5.2	B4/5000		G4/5000
BVH (80°-90°)	393.7	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°	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6
2.5°	10791.9	10771.6	10762.9	10790.5	10810.8	10834.0	10867.4	10899.4	10903.7	10945.8	11001.0
5°	10922.6	10905.2	10886.3	10882.0	10874.7	10873.2	10882.0	10918.2	10927.0	10967.6	11086.7
7.5°	11213.0	11195.6	11160.7	11147.6	11108.4	11038.8	11005.4	11024.2	11028.6	11078.0	11226.1
10°	11686.3	11632.6	11590.5	11546.9	11423.5	11313.2	11231.9	11197.0	11189.8	11237.7	11409.0
12.5°	12251.1	12206.1	12159.6	12044.9	11888.1	11689.2	11545.5	11465.6	11459.8	11500.5	11629.7
15°	12847.8	12847.8	12815.9	12679.4	12525.5	12195.9	11973.8	11840.2	11848.9	11880.9	11940.4
17.5°	13618.8	13554.9	13540.4	13385.0	13213.7	12913.2	12560.3	12346.9	12357.1	12371.6	12326.6
20°	14402.8	14383.9	14362.1	14259.1	14103.7	13717.5	13321.1	13040.9	13042.4	12990.1	12789.7
22.5°	15439.4	15377.0	15393.0	15276.8	15066.3	14669.9	14214.0	13881.6	13903.3	13827.8	13464.9
25°	16468.8	16406.4	16373.0	16294.6	16113.1	15737.1	15195.5	14890.6	14864.5	14728.0	14201.0
27.5°	17496.8	17460.5	17488.1	17393.7	17245.6	16826.0	16329.5	15991.2	16008.6	15914.2	15128.7
30°	18561.0	18520.4	18640.9	18488.4	18397.0	17989.0	17512.8	17114.9	17129.5	17164.3	16283.0
32.5°	19363.9	19411.8	19622.4	19604.9	19587.5	19133.1	18632.2	18411.5	18433.3	18555.2	17653.6
35°	20139.2	20143.6	20439.8	20663.4	20757.7	20377.3	19857.6	19850.3	19992.6	20364.3	19564.3
37.5°	20782.4	20767.9	21162.8	21509.8	21768.3	21473.5	21187.5	21633.2	21762.5	22533.4	21488.0
40°	21133.8	21164.3	21672.4	22105.1	22613.3	22473.9	22504.4	23644.1	23962.1	24637.2	22926.9
42.5°	20887.0	20979.9	21771.2	22653.9	23420.5	23606.4	24219.1	25816.1	25951.2	26073.1	24342.5
45°	20473.2	20570.4	21447.4	22873.1	24086.9	24872.4	25925.0	27487.3	27635.4	27498.9	25520.0
47.5°	20042.0	20142.1	21119.3	22784.6	24638.7	26144.3	27442.3	28965.3	29154.0	28731.5	26652.4
50°	19494.6	19649.9	20718.5	22597.3	25085.8	27516.3	28878.2	30486.9	30574.0	29964.2	27510.5
52.5°	18820.9	18992.2	20147.9	22276.4	25435.7	28474.6	30331.5	32137.7	32129.0	31404.5	28492.0
55°	18112.4	18267.7	19458.3	21771.2	25631.7	29212.1	31493.0	33956.9	34061.5	33454.6	29380.5
57.5°	17205.0	17345.8	18643.8	21091.7	25428.5	29837.9	33374.7	36118.8	36171.1	34881.8	30087.6
60°	16002.8	16210.4	17514.2	20227.8	24844.8	30562.4	35448.0	38392.5	38456.3	36285.8	30542.1
62.5°	14683.0	14765.8	16094.3	18897.9	23995.5	31121.4	36885.4	40171.0	40078.1	37383.4	30678.5
65°	13074.3	13139.6	14289.5	17187.5	22417.3	30815.0	37400.8	41085.7	40971.0	38073.0	30258.9
67.5°	11390.1	11591.9	12495.0	14815.1	20214.7	29400.9	36965.2	41348.5	41290.4	38125.3	29257.1
70°	9203.6	9274.7	10090.7	12069.6	16866.7	26569.7	35513.3	40674.8	40629.8	36958.0	27211.4
72.5°	6490.0	6420.3	6816.6	8368.7	12182.8	21135.2	30321.4	36889.7	36965.2	33061.1	23696.4
75°	3445.3	3578.9	4196.0	5123.7	6906.7	13586.8	24174.0	30530.4	30504.3	27645.5	18730.9
77.5°	1835.2	1832.3	2256.2	2652.6	3381.5	6243.1	15944.7	23024.1	23151.9	21419.8	12860.9
80°	881.3	914.7	940.8	1078.8	1685.6	2884.9	6670.0	13351.6	14222.8	12775.2	6109.6
82.5°	705.6	708.5	711.4	680.9	696.9	1174.6	2569.9	3863.5	4002.9	3217.4	1970.2
85°	522.7	490.7	486.4	412.3	466.1	705.6	1296.5	1649.4	1568.0	1525.9	1112.2
87.5°	210.5	197.5	191.7	180.0	180.0	265.7	457.3	596.7	595.3	543.0	373.1
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°	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6	10999.6
2.5°	11044.6	11096.8	11218.8	11323.3	11362.5	11458.4	11548.4	11600.6	11636.9	11658.7	11757.4
5°	11159.3	11263.8	11458.4	11605.0	11747.3	11924.4	12039.1	12111.7	12152.4	12175.6	12246.7
7.5°	11334.9	11440.9	11647.1	11872.1	12002.8	12148.0	12222.0	12274.3	12300.5	12293.2	12349.8
10°	11491.7	11596.3	11802.5	11975.2	12049.3	12132.0	12171.2	12182.8	12184.3	12190.1	12246.7
12.5°	11705.2	11769.1	11879.4	11992.7	11976.7	11979.6	12013.0	11998.5	11965.1	11959.3	11997.0
15°	11934.6	11936.0	11944.7	11920.1	11819.9	11776.3	11729.9	11690.7	11599.2	11593.4	11652.9
17.5°	12222.0	12153.8	11995.6	11827.1	11589.0	11425.0	11259.4	11191.2	11079.4	11057.6	11086.7
20°	12592.3	12450.0	12065.2	11647.1	11201.4	10908.1	10707.7	10505.9	10350.6	10312.8	10340.4
22.5°	13123.7	12843.5	12153.8	11455.4	10765.8	10264.9	9875.8	9633.3	9372.0	9238.4	9251.5
25°	13765.4	13326.9	12307.7	11213.0	10253.3	9530.2	8898.7	8412.3	8117.5	7921.5	7973.8
27.5°	14606.1	14003.5	12492.1	10973.4	9615.9	8590.9	7674.7	7015.6	6715.0	6622.1	6561.1
30°	15580.3	14820.9	12686.7	10619.2	8927.7	7427.9	6254.8	5705.9	5361.8	5306.7	5260.2
32.5°	16884.1	15850.3	13051.1	10234.4	8105.9	6264.9	4991.6	4360.0	4281.6	4236.6	4226.5
35°	18565.4	17199.1	13432.9	9735.0	7034.4	4901.6	3776.4	3435.2	3397.4	3446.8	3451.2
37.5°	20349.8	18662.7	13890.3	9171.6	5801.8	3657.3	2889.3	2652.6	2694.7	2848.6	2883.5
40°	21557.7	19626.7	14305.5	8406.5	4278.7	2657.0	2102.3	2051.5	2283.8	2481.3	2521.9
42.5°	22716.3	20357.0	14473.9	7394.5	3051.9	1891.8	1697.3	1871.5	2196.7	2413.0	2442.1
45°	23705.1	21206.4	14050.0	6180.7	2068.9	1581.1	1626.1	1867.1	2228.7	2468.2	2490.0
47.5°	24645.9	21900.4	13470.7	4869.7	1631.9	1521.6	1624.7	1906.3	2299.8	2526.3	2539.4
50°	25544.6	22428.9	12481.9	3705.2	1528.8	1494.0	1637.7	1967.3	2339.0	2481.3	2475.5
52.5°	26211.1	22701.8	11429.3	2990.9	1488.2	1472.2	1672.6	2044.3	2346.3	2431.9	2426.1
55°	26700.3	22649.6	10738.2	2449.3	1454.8	1463.5	1729.2	2102.3	2416.0	2545.2	2540.8
57.5°	26745.4	22412.9	9952.7	2068.9	1414.1	1462.1	1790.2	2183.6	2764.4	3002.5	2929.9
60°	26691.6	22020.9	9168.7	1816.3	1369.1	1470.8	1854.1	2427.6	3266.8	3454.1	3403.2
62.5°	26427.4	21290.6	7994.1	1649.4	1329.9	1502.7	1902.0	2620.7	3242.1	3263.9	3191.3
65°	25611.4	20313.5	6452.2	1480.9	1290.7	1524.5	1941.2	2671.5	2977.8	2908.1	2871.8
67.5°	23996.9	18131.3	4977.1	1327.0	1239.9	1520.1	2057.3	2598.9	2877.7	2826.8	2780.4
70°	21702.9	15651.4	3455.5	1168.8	1154.3	1492.5	2028.3	2623.6	2829.7	2751.3	2688.9
72.5°	18131.3	12278.7	2198.2	1039.6	1026.5	1427.2	1955.7	2607.6	2797.8	2763.0	2677.3
75°	13652.2	8570.5	1396.7	898.7	913.2	1308.2	1839.6	2521.9	2781.8	2672.9	2508.9
77.5°	8595.2	4230.8	1086.0	763.7	785.5	1128.1	1589.8	2202.5	2670.0	2604.7	2394.2
80°	3250.8	1717.6	849.4	620.0	638.8	876.9	1303.8	1812.0	2458.1	2565.5	2475.5
82.5°	1496.9	1074.4	637.4	498.0	505.3	638.8	972.8	1341.6	2080.6	2355.0	2580.0
85°	874.0	704.2	425.4	332.5	345.6	377.5	547.4	818.9	1348.8	1796.0	2009.4
87.5°	297.6	245.4	165.5	140.8	136.5	155.4	132.1	268.6	400.7	705.6	805.8
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)