

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: P510818

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

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
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-HSS
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: 54018 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

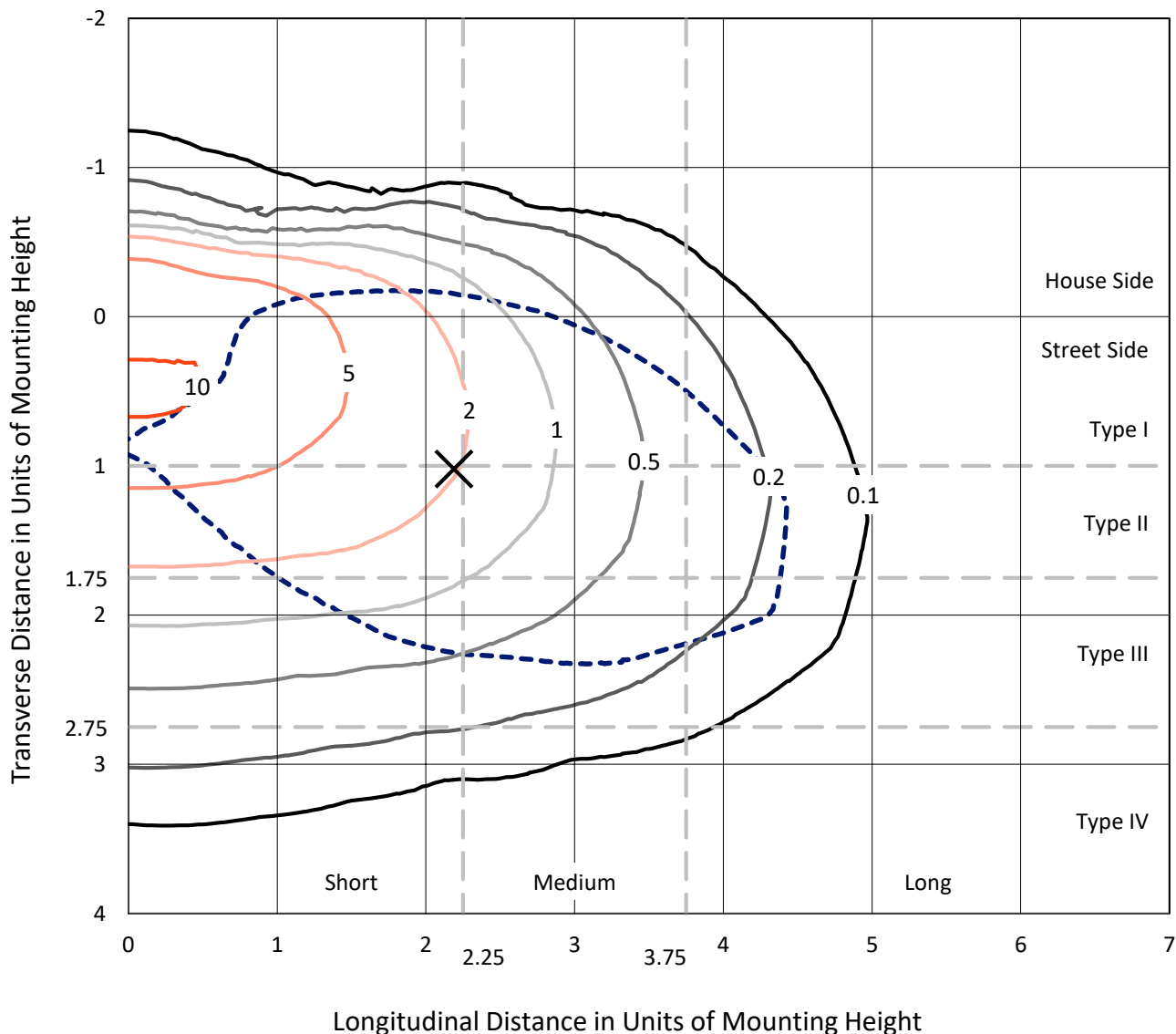
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510818
 CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

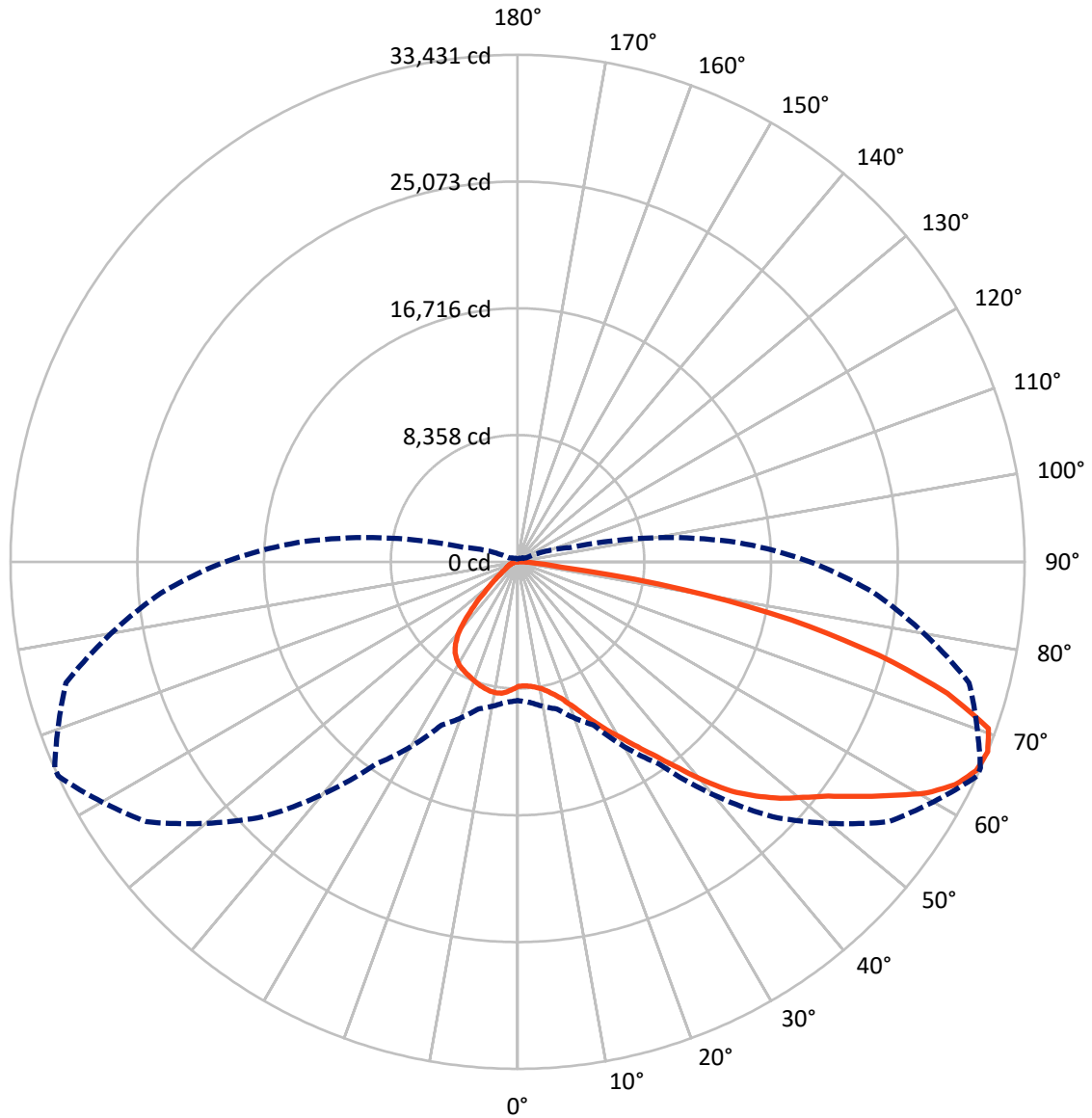
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc
 Type III - Short - N/A

REPORT NUMBER: P510818
CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510818
 CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

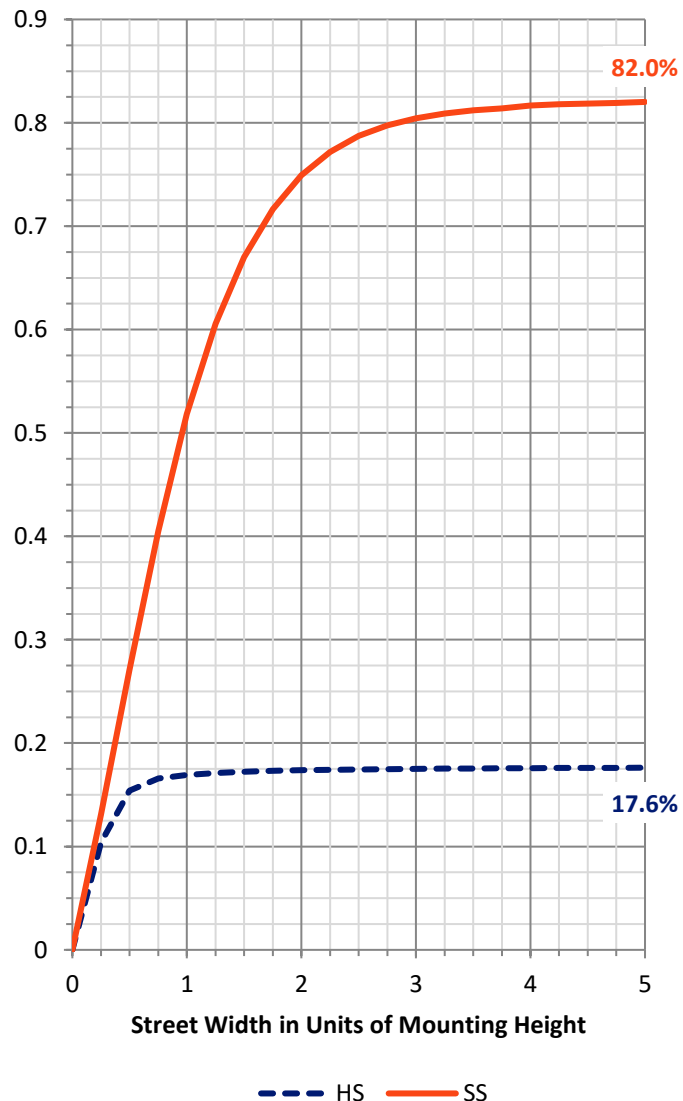
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9654.3	0.0	9654.3
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	44363.7	0.0	44363.7
	% Fixture	82.1	0.0	82.1
Total	Lumens	54018.0	0.0	54018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	812.1	1.5
10°-20°	2507.2	4.6
20°-30°	4349.5	8.1
30°-40°	6561.1	12.1
40°-50°	9097.4	16.8
50°-60°	11229.6	20.8
60°-70°	11965.0	22.1
70°-80°	6846.5	12.7
80°-90°	649.6	1.2
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°	54018.0	100.0
0°-180°	54018.0	100.0

Coefficient of Utilization

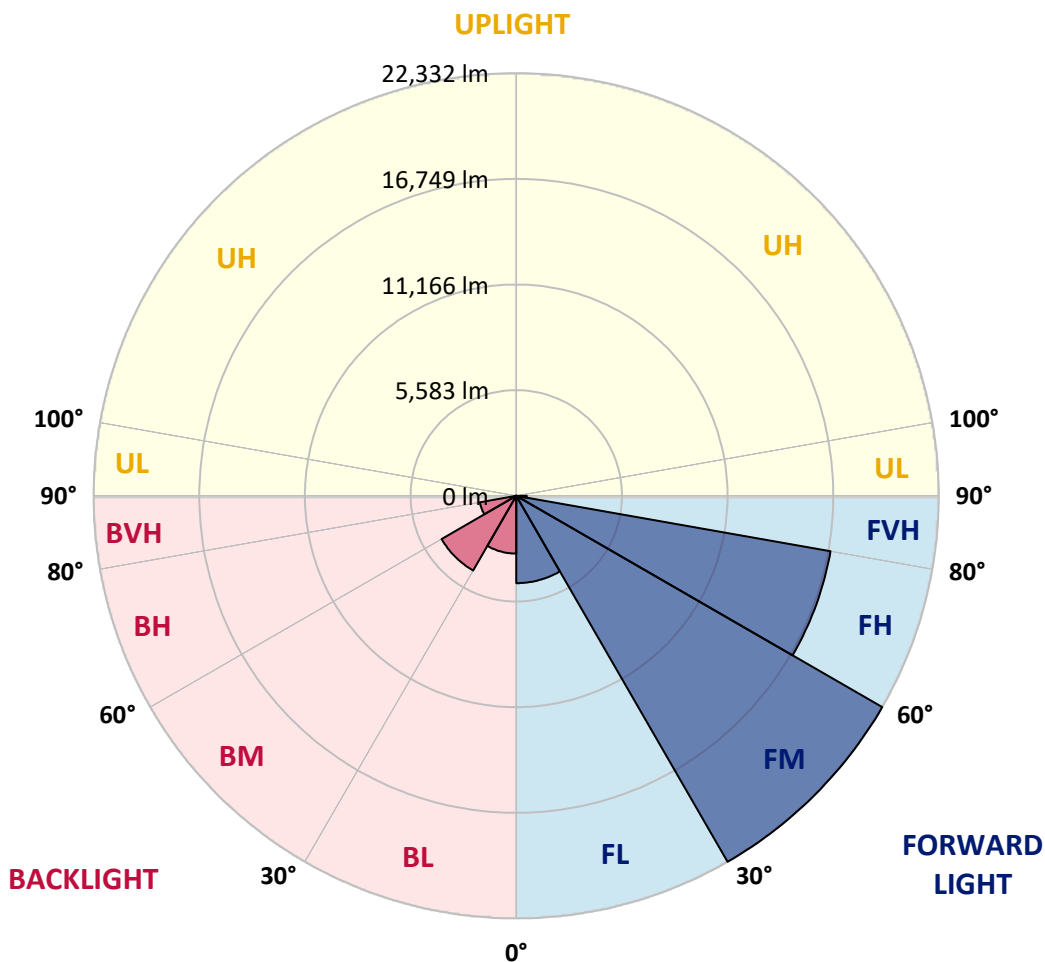


REPORT NUMBER: P510818
 CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4613.9	8.5			
FM (30°-60°)	22331.8	41.3			
FH (60°-80°)	16862.9	31.2			G5
FVH (80°-90°)	555.1	1.0			G4/750
BL (0°-30°)	3054.9	5.7	B4/5000		
BM (30°-60°)	4556.3	8.4	B3/5000		
BH (60°-80°)	1948.6	3.6	B3/2500		G3/2500
BVH (80°-90°)	94.5	0.2			G1/100
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: P510818

CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4
2.5°	8129.1	8118.5	8109.0	8125.6	8135.0	8150.4	8172.9	8188.3	8193.0	8207.2	8225.0
5°	8259.3	8258.1	8245.1	8238.0	8217.9	8210.8	8215.5	8234.4	8235.6	8253.4	8309.0
7.5°	8514.9	8512.5	8480.5	8466.3	8423.7	8376.4	8340.9	8344.5	8343.3	8361.0	8435.6
10°	8900.6	8881.7	8836.7	8792.9	8710.1	8621.4	8556.3	8497.1	8497.1	8523.1	8606.0
12.5°	9336.0	9362.1	9300.6	9234.3	9095.8	8936.1	8822.5	8756.2	8749.1	8762.2	8821.3
15°	9876.8	9876.8	9835.4	9740.7	9618.9	9396.4	9162.1	9078.1	9066.3	9093.5	9089.9
17.5°	10486.2	10503.9	10425.8	10378.5	10191.6	9945.4	9652.0	9506.4	9506.4	9488.7	9407.0
20°	11263.6	11166.6	11174.9	11096.8	10959.5	10602.2	10304.0	10092.2	10089.8	10054.3	9824.7
22.5°	12108.5	12055.2	12009.1	11940.4	11751.1	11431.6	11017.5	10808.0	10803.3	10715.8	10375.0
25°	12941.5	12981.7	12930.8	12805.4	12667.0	12319.1	11862.3	11656.5	11655.3	11509.7	11027.0
27.5°	13798.2	13842.0	13825.4	13711.8	13527.2	13255.1	12823.2	12554.6	12538.0	12443.3	11836.3
30°	14744.8	14705.8	14756.6	14708.1	14615.8	14172.1	13781.6	13469.2	13509.5	13481.1	12755.7
32.5°	15433.5	15458.3	15625.2	15629.9	15532.9	15203.9	14727.1	14535.4	14599.3	14561.4	13885.7
35°	16055.9	16096.1	16311.5	16523.3	16594.3	16234.6	15749.4	15737.6	15820.4	16051.1	15442.9
37.5°	16590.7	16619.1	16920.9	17196.6	17426.1	17180.0	16827.4	17247.4	17369.3	17841.4	17049.8
40°	16911.4	16948.1	17338.5	17726.7	18136.1	18048.5	18015.4	19009.3	19124.1	19539.4	18222.5
42.5°	16730.3	16802.5	17453.3	18163.3	18765.6	18940.7	19393.9	20671.8	20803.2	20838.7	19375.0
45°	16407.3	16497.2	17225.0	18373.9	19356.0	19918.1	20780.7	22026.7	22098.9	21998.3	20329.9
47.5°	16059.4	16155.3	16968.2	18311.2	19830.5	21055.2	22019.6	23302.3	23353.1	23044.3	21291.9
50°	15664.2	15753.0	16627.4	18164.5	20187.9	22128.4	23292.8	24405.1	24595.6	23985.0	22039.7
52.5°	15183.8	15278.5	16206.2	17934.9	20501.4	22924.8	24415.7	25651.1	25664.1	25161.2	22882.2
55°	14561.4	14725.9	15677.2	17537.3	20665.9	23608.7	25394.3	27299.4	27383.4	26897.1	23587.4
57.5°	13869.2	14012.4	15040.6	17007.2	20518.0	24128.2	26968.0	29067.2	29056.5	28080.3	24203.9
60°	12954.5	13056.3	14211.1	16313.8	20041.2	24756.5	28606.9	30961.6	30942.7	29239.9	24600.3
62.5°	11780.7	11882.5	12968.7	15226.4	19340.7	25177.8	29719.2	32380.4	32325.9	30083.6	24722.2
65°	10419.9	10602.2	11545.2	13814.8	18101.8	24900.9	30256.4	33215.7	33128.2	30727.3	24431.1
67.5°	9144.4	9299.4	10046.0	11871.8	16273.6	23777.9	29877.7	33431.1	33405.1	30820.8	23608.7
70°	7338.7	7395.5	8079.4	9642.5	13540.2	21373.5	28569.0	32934.1	32946.0	29959.4	21956.9
72.5°	5023.0	5161.5	5465.6	6699.7	9853.1	16997.8	24624.0	29639.9	29642.3	26863.9	19130.0
75°	2701.4	2915.6	3270.6	3882.3	5508.2	10907.4	19774.9	24594.4	24640.5	22398.2	15205.1
77.5°	1339.5	1416.4	1622.3	2076.6	2525.1	5146.1	12717.9	18461.5	18571.5	17193.0	10370.2
80°	612.9	626.0	641.3	637.8	966.7	2257.7	5459.6	11087.3	11120.4	10225.9	4734.3
82.5°	479.2	476.9	484.0	440.2	442.5	870.9	1889.7	2903.8	3096.6	2437.5	1501.6
85°	289.9	288.7	311.2	241.4	297.0	470.9	953.7	1158.4	1172.6	953.7	777.4
87.5°	110.0	106.5	98.2	86.4	99.4	132.5	330.1	426.0	416.5	295.8	268.6
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: P510818

CATALOG NUMBER: CST-CA8-480-722-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4	8208.4
2.5°	8240.3	8278.2	8348.0	8401.3	8419.0	8475.8	8530.2	8539.7	8578.8	8594.1	8645.0
5°	8343.3	8407.2	8516.0	8588.2	8620.2	8714.8	8776.4	8807.1	8796.5	8802.4	8859.2
7.5°	8493.6	8553.9	8641.5	8729.0	8744.4	8761.0	8755.1	8750.3	8708.9	8673.4	8726.7
10°	8630.8	8687.6	8742.0	8755.1	8677.0	8633.2	8555.1	8494.7	8414.3	8377.6	8420.2
12.5°	8823.7	8835.5	8782.3	8711.3	8543.3	8387.1	8260.5	8150.4	8051.0	7982.4	8039.2
15°	9027.2	8981.1	8826.1	8619.0	8358.7	8135.0	7928.0	7744.5	7580.1	7539.8	7555.2
17.5°	9297.0	9171.6	8859.2	8511.3	8106.6	7758.7	7492.5	7260.6	7045.2	6955.3	6947.0
20°	9626.0	9423.6	8926.6	8375.2	7808.4	7345.8	6934.0	6587.3	6290.3	6046.5	6052.5
22.5°	10054.3	9760.8	9028.4	8233.2	7478.3	6861.8	6263.1	5673.8	5185.1	4974.5	4922.4
25°	10619.9	10182.1	9172.8	8104.3	7109.1	6246.5	5400.5	4568.6	4051.5	3846.8	3824.3
27.5°	11324.0	10747.7	9392.8	7961.1	6713.9	5516.4	4300.0	3484.7	3010.3	2794.9	2722.7
30°	12123.8	11444.6	9618.9	7812.0	6235.9	4578.1	3278.9	2480.1	1993.8	1800.9	1776.1
32.5°	13159.2	12327.4	9954.9	7577.7	5537.7	3598.3	2287.3	1547.7	1217.6	1134.8	1111.1
35°	14630.0	13521.3	10370.2	7281.9	4640.8	2513.3	1417.6	906.4	730.1	688.7	680.4
37.5°	16001.4	14692.7	10789.1	6790.8	3523.8	1569.0	810.5	581.0	541.9	543.1	545.5
40°	17088.9	15493.8	11127.5	6144.8	2318.0	891.0	563.2	482.8	484.0	480.4	478.0
42.5°	18056.8	16132.8	11280.2	5189.8	1343.0	596.4	488.7	444.9	434.3	437.8	435.4
45°	18857.9	16784.8	10984.4	4116.6	791.6	534.8	461.5	413.0	401.1	420.1	422.4
47.5°	19700.4	17403.6	10531.2	3101.4	642.5	508.8	436.6	389.3	383.4	407.0	409.4
50°	20409.1	17852.1	9758.5	2337.0	612.9	480.4	414.1	365.6	364.4	385.7	385.7
52.5°	21002.0	18123.1	8841.4	1804.5	592.8	455.6	391.7	343.2	343.2	350.2	351.4
55°	21419.7	18068.6	8294.8	1419.9	571.5	431.9	368.0	321.9	307.7	302.9	305.3
57.5°	21495.4	17924.3	7660.5	1107.5	546.7	409.4	346.7	297.0	271.0	267.4	266.2
60°	21446.9	17607.2	6936.4	925.3	518.3	388.1	325.4	271.0	244.9	236.7	239.0
62.5°	21244.5	17045.1	6099.8	811.7	489.9	371.5	301.7	253.2	229.6	218.9	218.9
65°	20634.0	16240.5	4857.3	711.1	454.4	353.8	282.8	246.1	220.1	208.3	205.9
67.5°	19292.1	14570.9	3650.4	623.6	420.1	334.9	280.4	244.9	215.4	198.8	196.4
70°	17492.4	12516.7	2492.0	547.9	382.2	317.1	279.3	246.1	210.6	189.3	187.0
72.5°	14602.8	9867.3	1435.3	476.9	344.3	300.6	274.5	247.3	202.3	176.3	172.8
75°	10972.5	6921.0	842.5	409.4	307.7	275.7	261.5	240.2	189.3	160.9	157.4
77.5°	6599.1	3231.5	634.2	339.6	263.9	242.6	233.1	220.1	172.8	149.1	145.5
80°	2421.0	1227.1	498.2	272.2	209.4	210.6	201.2	192.9	157.4	137.3	134.9
82.5°	1055.5	750.2	368.0	207.1	164.5	188.1	165.7	158.6	134.9	123.1	118.3
85°	640.2	447.3	236.7	140.8	113.6	127.8	116.0	121.9	104.1	97.0	93.5
87.5°	211.8	133.7	105.3	68.6	56.8	53.2	52.1	62.7	59.2	54.4	54.4
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)