

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: P510591

Luminaire Tested: **CST-CA10-760-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510591
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-760-727-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 89009 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U0 - G5

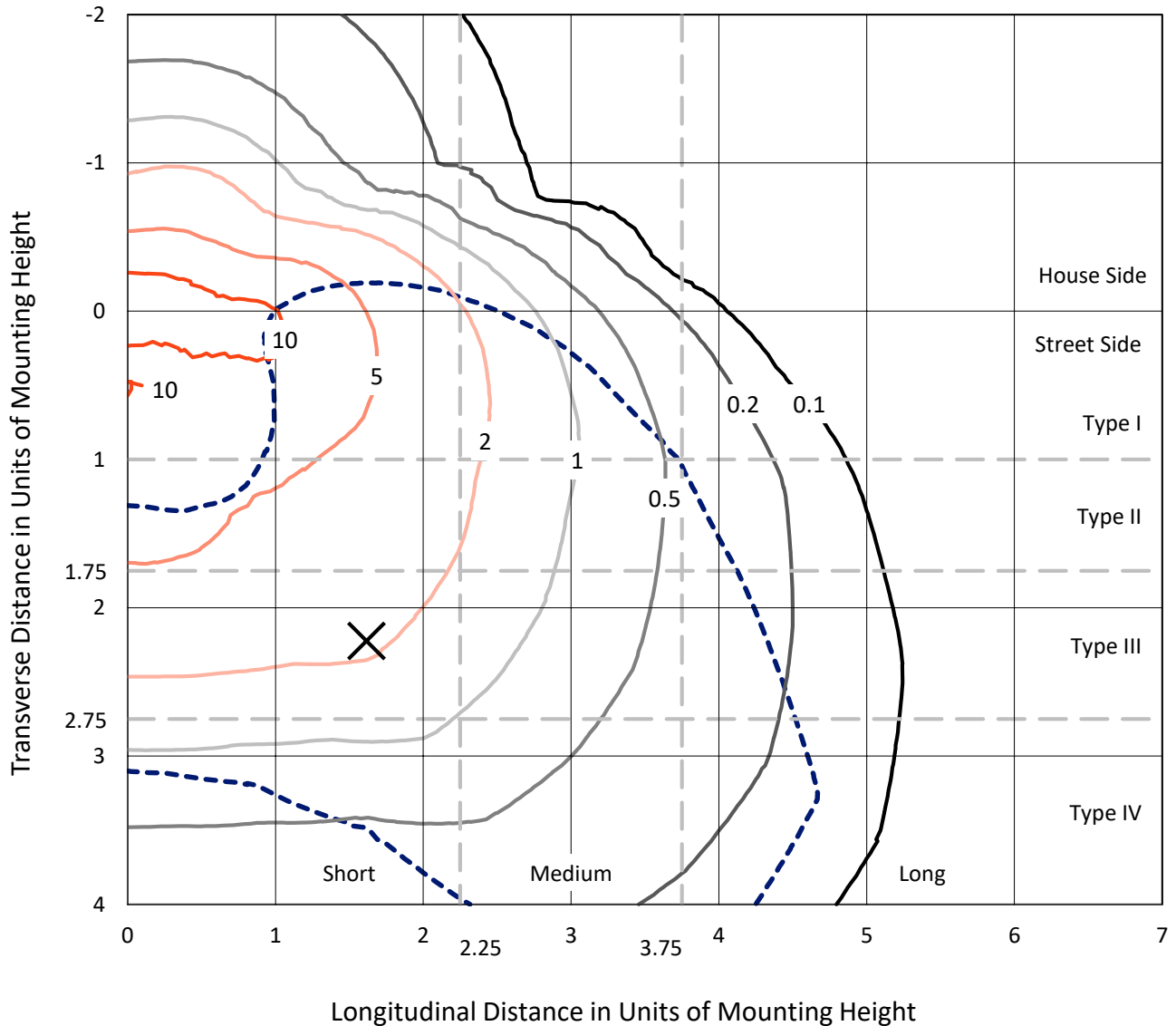
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

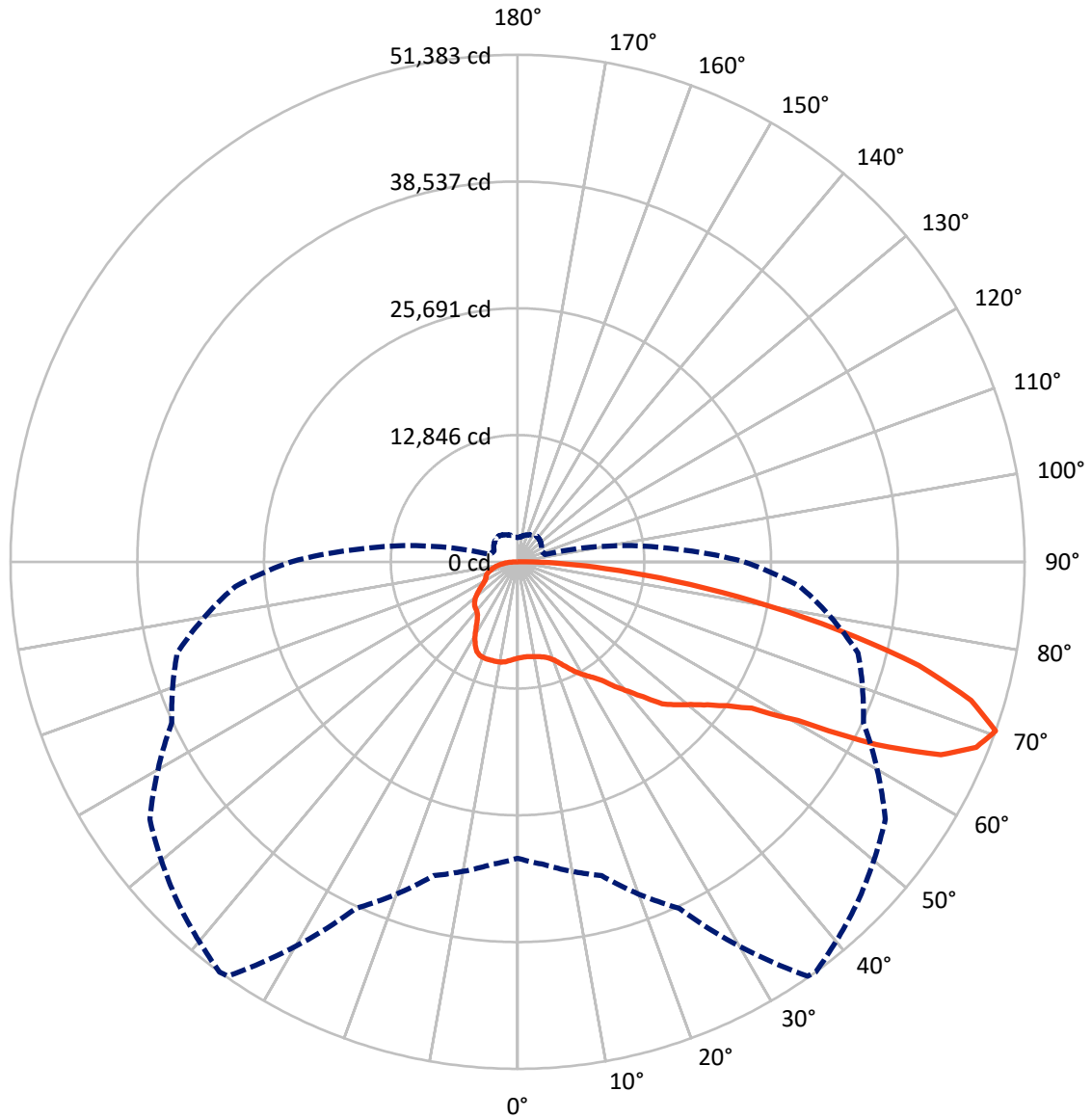
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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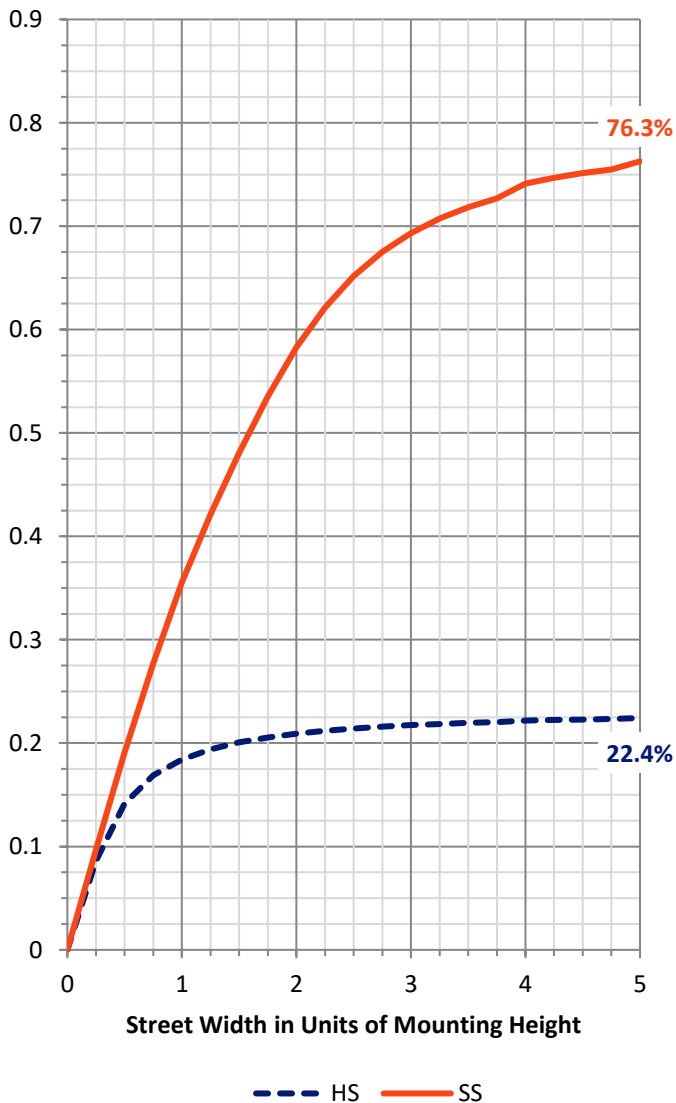
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20280.2	0.0	20280.2
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	68728.8	0.0	68728.8
	% Fixture	77.2	0.0	77.2
Total	Lumens	89009.0	0.0	89009.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	944.5	1.1
10°-20°	2919.9	3.3
20°-30°	5267.0	5.9
30°-40°	8157.6	9.2
40°-50°	12391.4	13.9
50°-60°	17175.2	19.3
60°-70°	22333.7	25.1
70°-80°	16493.2	18.5
80°-90°	3326.3	3.7
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°	89009.0	100.0
0°-180°	89009.0	100.0

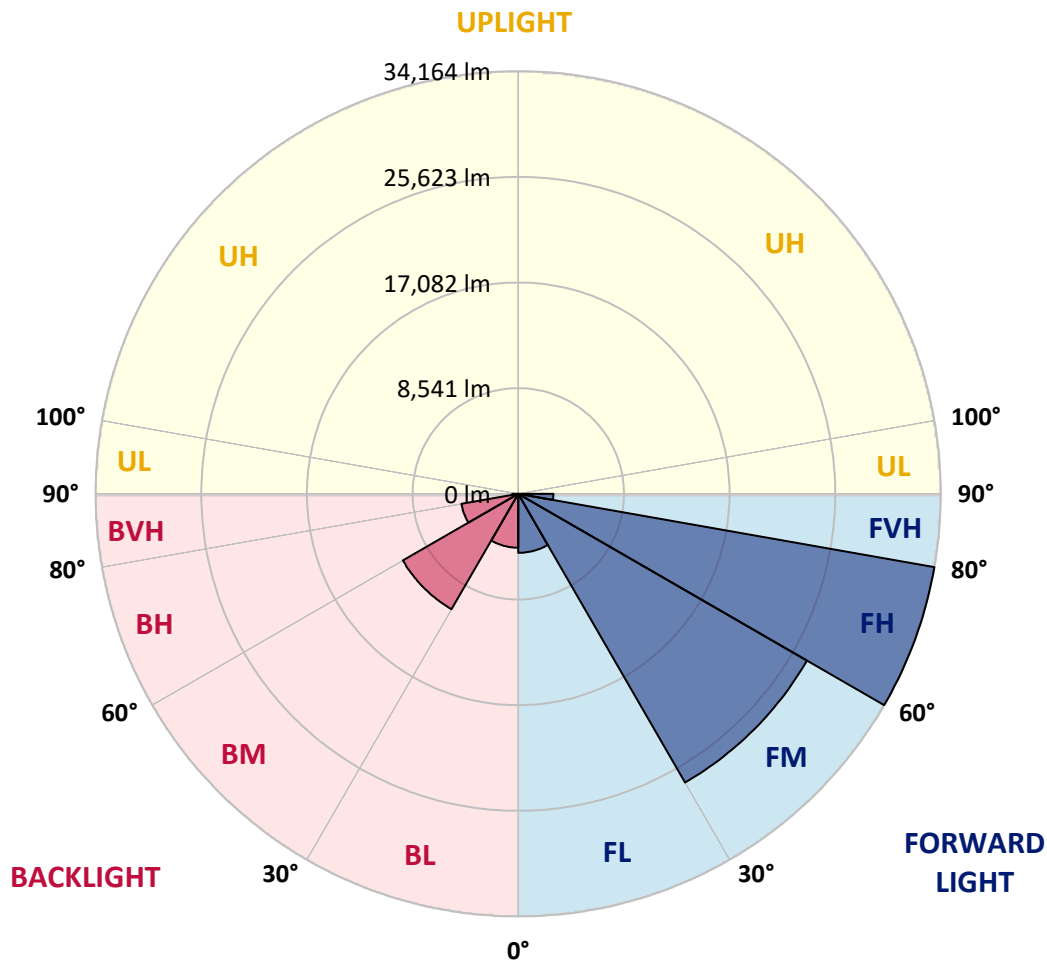


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4771.8	5.4			
FM (30°-60°)	26951.7	30.3			
FH (60°-80°)	34163.6	38.4			G5
FVH (80°-90°)	2841.7	3.2			G5
BL (0°-30°)	4359.7	4.9	B4/5000		
BM (30°-60°)	10772.6	12.1	B5		
BH (60°-80°)	4663.3	5.2	B4/5000		G4/5000
BVH (80°-90°)	484.6	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1
2.5°	9690.2	9677.3	9669.9	9684.6	9690.2	9692.0	9695.7	9692.0	9682.8	9716.0	9756.5
5°	9692.0	9684.6	9669.9	9657.0	9657.0	9657.0	9658.8	9701.2	9719.7	9716.0	9765.7
7.5°	9706.8	9701.2	9673.6	9664.4	9686.5	9693.9	9730.7	9717.8	9738.1	9771.3	9813.6
10°	9708.6	9701.2	9677.3	9697.5	9760.2	9771.3	9787.8	9824.7	9832.1	9872.6	9915.0
12.5°	9727.0	9727.0	9736.2	9780.5	9846.8	9859.7	9922.4	9951.9	9996.1	10016.4	10068.0
15°	9824.7	9822.9	9845.0	9894.7	10001.6	10009.0	10086.4	10174.9	10208.0	10257.8	10340.7
17.5°	10056.9	10068.0	10069.8	10106.7	10233.8	10237.5	10364.7	10447.6	10523.2	10611.6	10801.5
20°	10607.9	10587.7	10565.6	10565.6	10615.3	10641.1	10738.8	10871.5	11026.3	11182.9	11405.9
22.5°	11300.9	11341.4	11260.3	11218.0	11241.9	11212.4	11286.1	11393.0	11573.6	11807.7	12089.7
25°	12128.4	12132.1	12126.5	11955.1	11901.7	11920.1	11980.9	12080.5	12320.0	12506.2	12915.3
27.5°	12935.6	12919.0	12860.0	12679.4	12627.8	12653.6	12651.8	12926.4	13171.5	13409.2	13890.2
30°	13669.1	13713.3	13608.3	13304.2	13309.7	13306.0	13390.8	13744.6	14192.5	14634.8	15128.7
32.5°	14962.8	14828.3	14686.4	14085.6	13975.0	13962.1	14011.9	14538.9	15202.4	15948.8	16542.2
35°	16181.0	16147.8	16007.8	15397.7	14758.2	14747.2	14679.0	15320.3	16252.9	17635.1	18375.9
37.5°	17426.8	17378.9	17240.7	16721.0	16085.2	16024.3	15451.2	16153.3	17413.9	19607.0	20663.0
40°	18912.2	18882.7	18669.0	18003.7	17351.3	17259.1	16663.8	17028.7	18879.1	22233.2	22977.7
42.5°	20215.2	20209.7	19964.5	19347.2	18792.4	18700.3	18193.5	18573.1	20915.5	24805.9	25244.6
45°	21171.7	21317.3	21328.3	20976.3	20593.0	20511.9	20377.4	20900.8	23270.8	27140.9	27076.4
47.5°	21978.9	22104.2	21973.3	21792.7	21661.9	21667.4	21875.7	22915.1	25596.6	29175.5	28674.3
50°	23327.9	23250.5	22570.5	22463.6	22629.4	22727.1	23331.6	25089.8	28259.6	31084.8	30108.1
52.5°	25274.0	24977.3	23643.0	23425.6	24054.0	24090.9	25052.9	27034.0	30920.8	32723.2	31420.2
55°	27937.1	27692.0	26184.5	25180.1	25497.0	25745.8	27100.4	29026.3	33093.6	34263.9	32430.2
57.5°	31873.6	31892.0	30662.8	28790.4	27712.3	27977.6	29035.5	30963.2	34888.6	35553.9	33060.5
60°	35028.7	35612.9	35246.2	34391.1	32843.0	32662.4	31857.0	32981.2	36422.0	36650.5	33663.1
62.5°	37216.3	37481.7	38742.2	38922.8	40692.1	40767.6	36910.4	35345.7	38106.4	37369.2	33790.3
65°	37105.7	37269.7	39261.9	41687.2	46913.8	47147.9	44890.3	38922.8	39260.1	37689.9	33419.8
67.5°	34521.9	34768.9	37301.1	41834.7	50229.3	50140.8	48708.8	43902.5	39639.7	37175.7	31654.3
70°	30034.4	30795.5	32922.2	38725.6	51265.0	51382.9	48743.9	45492.9	38661.1	35721.7	28711.1
72.5°	24754.3	24993.9	27002.7	33497.2	48237.0	48063.8	46746.1	43393.8	36891.9	33091.8	23560.1
75°	18825.6	18825.6	21258.3	26694.9	41423.7	42031.9	42544.2	39302.5	32682.7	26971.4	16042.8
77.5°	12497.0	12944.8	14903.8	20060.4	32789.5	33239.2	35008.4	33500.9	26759.5	19778.4	7327.5
80°	6629.0	6684.3	8785.3	13330.0	23453.2	24301.0	26733.7	25838.0	19247.6	9266.3	1852.2
82.5°	2318.4	2530.4	3862.8	7725.6	15453.0	15982.0	17734.6	15353.5	6798.6	2051.2	1024.7
85°	1151.8	1192.4	1701.0	3678.5	8700.5	8956.7	10361.0	5980.3	1094.7	895.7	696.6
87.5°	554.7	567.6	652.4	1315.9	3781.7	3956.8	4189.0	1946.1	405.4	340.9	302.2
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°	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1	9749.1
2.5°	9765.7	9782.3	9813.6	9822.9	9800.7	9841.3	9880.0	9915.0	9913.2	9926.1	9972.1
5°	9787.8	9822.9	9856.0	9915.0	9972.1	10005.3	10036.6	10066.1	10075.3	10103.0	10130.6
7.5°	9856.0	9891.0	9966.6	10069.8	10073.5	10156.4	10209.9	10219.1	10226.5	10226.5	10291.0
10°	9961.1	10025.6	10147.2	10219.1	10283.6	10255.9	10311.2	10276.2	10250.4	10261.5	10305.7
12.5°	10141.7	10198.8	10373.9	10453.1	10394.2	10383.1	10327.8	10248.6	10158.3	10149.1	10189.6
15°	10425.5	10532.4	10689.0	10764.6	10617.2	10486.3	10300.2	10138.0	9962.9	9898.4	9924.2
17.5°	10882.5	11011.6	11182.9	11131.3	10862.3	10604.3	10296.5	9953.7	9614.6	9378.7	9439.5
20°	11551.5	11647.4	11787.4	11579.2	11186.6	10760.9	10255.9	9714.1	9141.0	8711.6	8661.8
22.5°	12253.7	12399.3	12314.5	11929.3	11415.2	10821.7	10171.2	9365.8	8479.4	7941.2	7860.1
25°	13099.6	13147.5	12854.5	12274.0	11479.7	10725.9	9896.6	8857.2	7803.0	7296.2	7272.2
27.5°	13997.1	13888.4	13342.9	12432.5	11407.8	10442.1	9345.5	8053.6	7191.1	6743.3	6673.3
30°	15010.7	14758.2	13746.5	12449.0	11136.9	9889.2	8648.9	7425.2	6693.5	6243.9	6172.0
32.5°	16315.5	15720.3	14120.6	12277.6	10565.6	9078.3	7812.2	6888.9	6245.7	5794.2	5729.7
35°	17983.4	16979.0	14516.8	11968.0	9861.6	8267.4	7119.3	6433.7	5882.7	5339.0	5252.4
37.5°	19905.6	18735.3	14990.5	11577.3	9089.4	7554.2	6651.2	6144.4	5613.6	4998.0	4894.8
40°	22139.2	20493.5	15720.3	11111.1	8396.4	7040.0	6424.5	6044.8	5464.3	4823.0	4705.0
42.5°	24074.3	22353.0	16588.3	10609.8	7742.2	6612.5	6323.1	5978.5	5370.3	4692.1	4557.6
45°	25863.8	23888.2	17436.0	10001.6	7052.9	6319.4	6201.5	5812.6	5204.5	4529.9	4389.9
47.5°	27317.9	25128.5	18173.2	9443.2	6501.9	6050.4	5936.1	5497.5	4926.2	4334.6	4231.4
50°	28434.7	26061.0	18576.8	8999.1	5919.5	5744.4	5593.3	5141.8	4592.6	4082.1	3993.6
52.5°	29577.3	26995.3	18775.8	9021.2	5377.7	5289.2	5134.4	4747.4	4327.2	3934.7	3838.8
55°	30242.6	27378.7	18565.8	8484.9	4880.1	4776.9	4642.4	4441.5	4190.8	3842.5	3752.2
57.5°	30631.5	27616.4	17926.3	6920.2	4281.1	4183.5	4205.6	4189.0	3982.6	3615.8	3532.9
60°	30911.6	27100.4	16615.9	5086.5	3770.7	3696.9	3879.4	3820.4	3641.6	3356.0	3286.0
62.5°	30684.9	26118.1	14257.0	3824.1	3354.1	3510.8	3671.1	3562.4	3319.1	3059.3	2978.2
65°	29302.7	24190.4	10836.5	3072.2	3219.6	3435.2	3564.2	3389.2	3142.2	2834.4	2797.6
67.5°	26787.1	20696.2	6391.3	2816.0	3118.3	3346.8	3453.7	3221.5	3004.0	2709.1	2664.9
70°	22948.3	15493.6	2854.7	2622.5	2941.3	3168.0	3238.0	3018.7	2782.8	2506.4	2462.2
72.5°	17080.3	9341.9	1924.0	2421.6	2679.6	2880.5	2957.9	2725.7	2558.0	2432.7	2419.8
75°	9485.6	3243.6	1774.7	2193.1	2394.0	2574.6	2670.4	2506.4	2373.7	2202.3	2132.3
77.5°	3020.6	1378.5	1686.3	1960.9	2215.2	2364.5	2349.7	2102.8	2060.4	1852.2	1833.7
80°	1205.3	1201.6	1559.1	1605.2	1890.9	2016.2	1983.0	1671.5	1726.8	1605.2	1557.3
82.5°	945.4	1100.2	1249.5	1225.6	1470.7	1618.1	1572.0	1227.4	1387.7	1275.3	1166.6
85°	718.7	963.9	801.7	798.0	1026.5	1201.6	1231.1	943.6	945.4	860.7	766.7
87.5°	370.4	355.7	307.8	305.9	342.8	488.4	599.0	536.3	423.9	318.8	305.9
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)