

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: P721880

Luminaire Tested: **CST-CA8-400-760-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-760-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56464 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

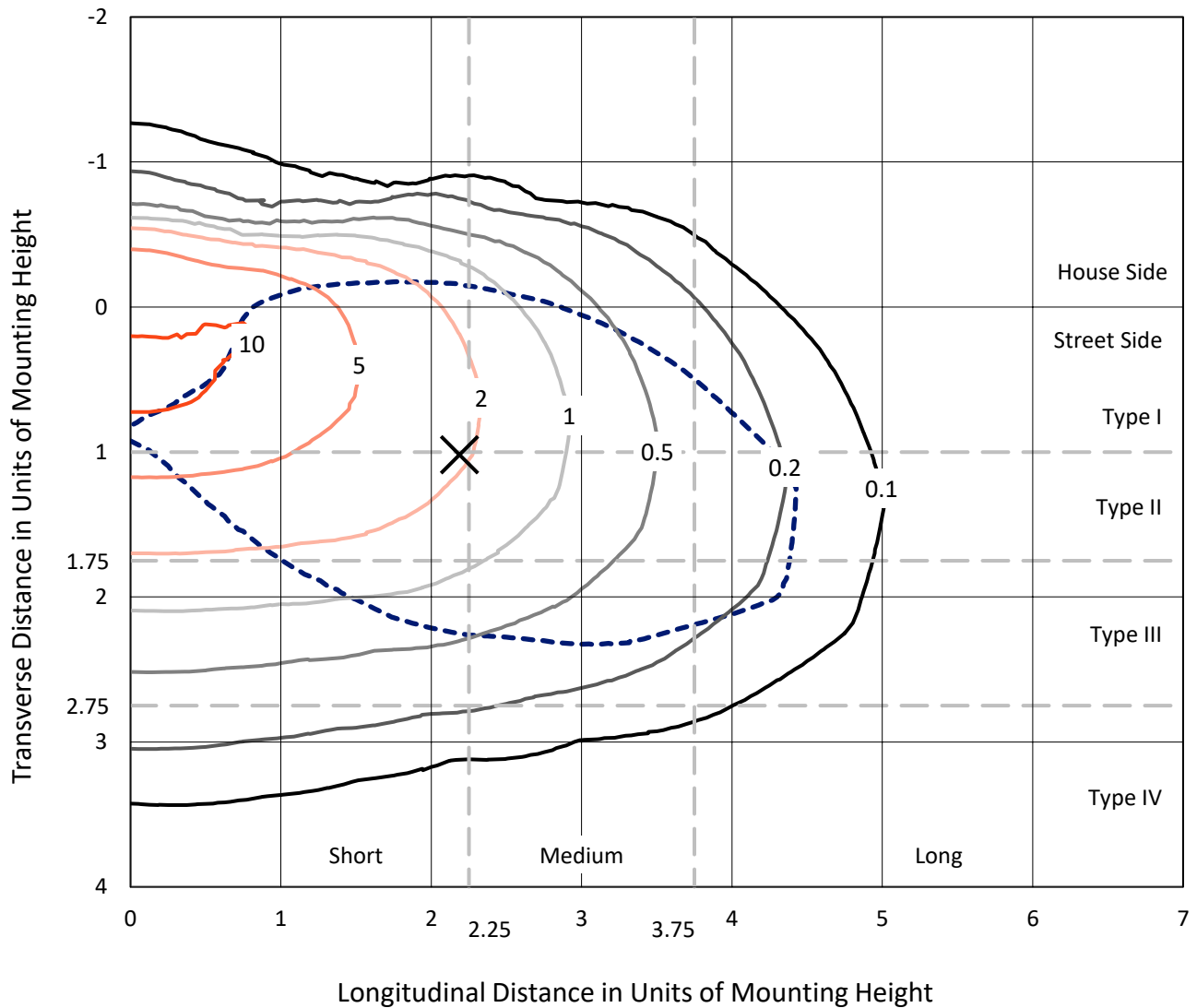
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

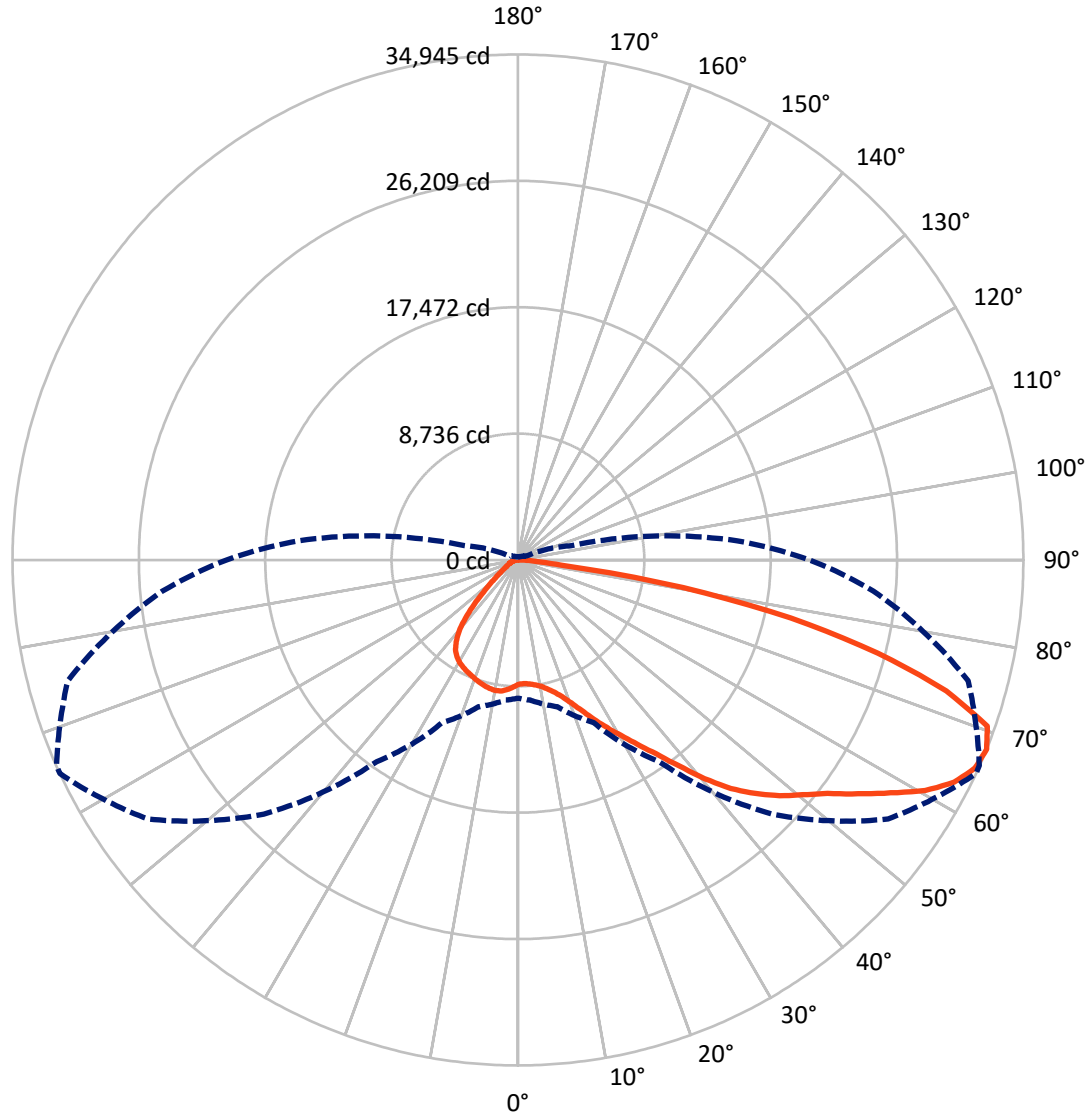
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.2 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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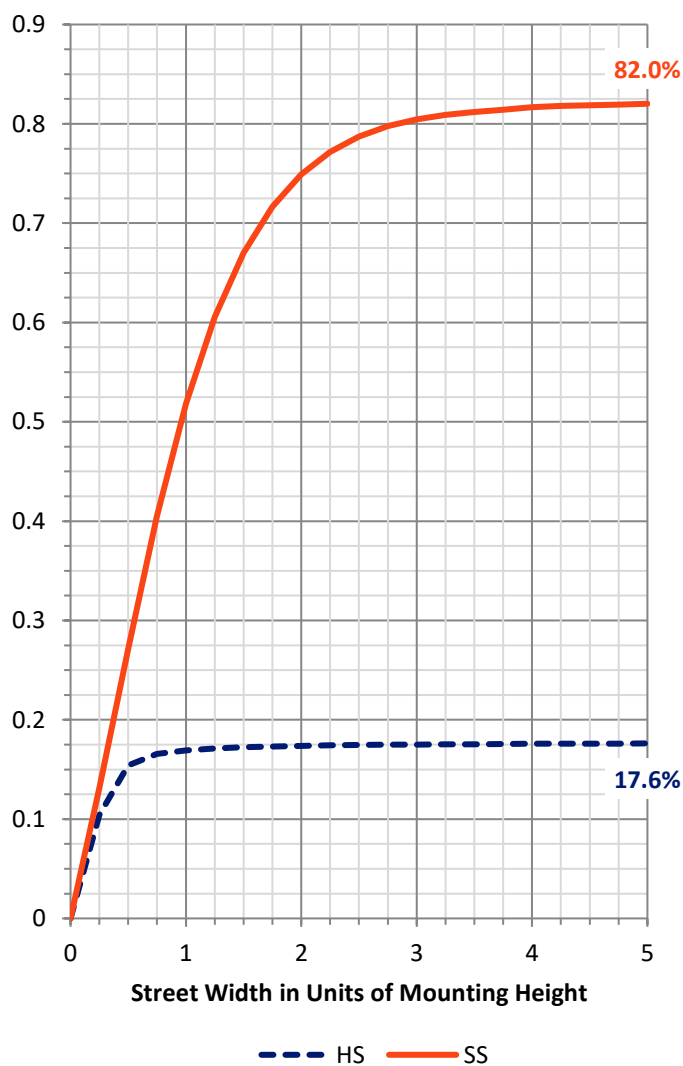
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10091.5	0.0	10091.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	46372.5	0.0	46372.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	56464.0	0.0	56464.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	848.9	1.5
10°-20°	2620.7	4.6
20°-30°	4546.4	8.1
30°-40°	6858.2	12.1
40°-50°	9509.4	16.8
50°-60°	11738.1	20.8
60°-70°	12506.7	22.1
70°-80°	7156.6	12.7
80°-90°	679.0	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°	56464.0	100.0
0°-180°	56464.0	100.0

Coefficient of Utilization

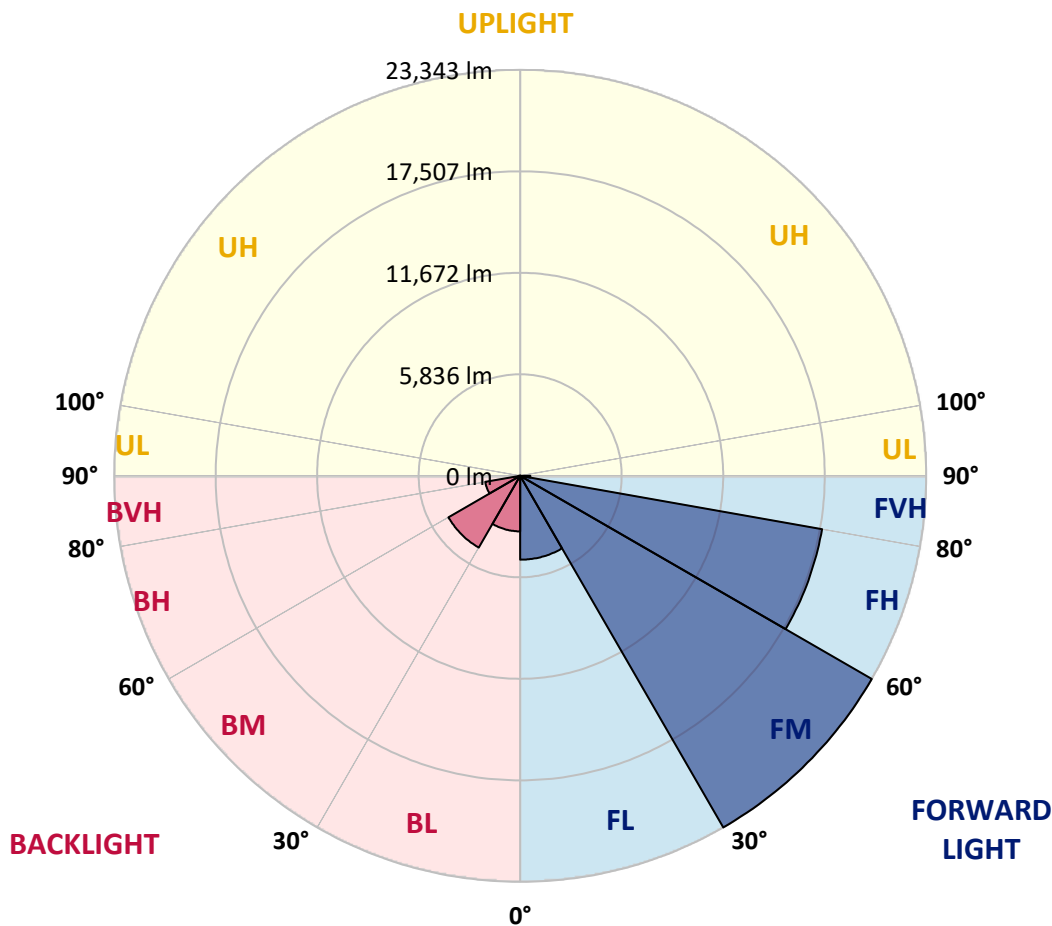


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4822.8	8.5			
FM (30°-60°)	23343.0	41.3			
FH (60°-80°)	17626.5	31.2			G5
FVH (80°-90°)	580.2	1.0			G4/750
BL (0°-30°)	3193.2	5.7	B4/5000		
BM (30°-60°)	4762.7	8.4	B3/5000		
BH (60°-80°)	2036.8	3.6	B3/2500		G3/2500
BVH (80°-90°)	98.8	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1
2.5°	8497.2	8486.1	8476.2	8493.5	8503.4	8519.5	8543.0	8559.0	8564.0	8578.8	8597.4
5°	8633.3	8632.0	8618.4	8611.0	8590.0	8582.5	8587.5	8607.3	8608.5	8627.1	8685.2
7.5°	8900.4	8897.9	8864.6	8849.7	8805.2	8755.7	8718.6	8722.3	8721.1	8739.6	8817.5
10°	9303.6	9283.8	9236.8	9191.1	9104.5	9011.7	8943.7	8881.9	8881.9	8909.1	8995.7
12.5°	9758.8	9786.0	9721.7	9652.4	9507.7	9340.7	9222.0	9152.7	9145.3	9158.9	9220.8
15°	10324.0	10324.0	10280.8	10181.8	10054.4	9821.9	9577.0	9489.2	9476.8	9505.2	9501.5
17.5°	10961.0	10979.6	10897.9	10848.5	10653.0	10395.8	10089.0	9936.9	9936.9	9918.4	9833.0
20°	11773.6	11672.2	11680.9	11599.2	11455.8	11082.2	10770.5	10549.1	10546.7	10509.6	10269.6
22.5°	12656.8	12601.1	12552.9	12481.1	12283.2	11949.3	11516.4	11297.4	11292.5	11201.0	10844.8
25°	13527.5	13569.6	13516.4	13385.3	13240.5	12876.9	12399.5	12184.3	12183.0	12030.9	11526.3
27.5°	14423.0	14468.7	14451.4	14332.7	14139.7	13855.3	13403.8	13123.0	13105.7	13006.8	12372.3
30°	15412.5	15371.7	15424.8	15374.1	15277.7	14813.8	14405.7	14079.1	14121.2	14091.5	13333.3
32.5°	16132.3	16158.3	16332.7	16337.6	16236.2	15892.4	15393.9	15193.5	15260.3	15220.8	14514.5
35°	16782.9	16825.0	17050.1	17271.5	17345.7	16969.7	16462.6	16450.2	16536.8	16778.0	16142.2
37.5°	17342.0	17371.6	17687.0	17975.2	18215.2	17957.9	17589.3	18028.4	18155.8	18649.3	17821.9
40°	17677.2	17715.5	18123.7	18529.3	18957.3	18865.8	18831.1	19870.1	19990.1	20424.2	19047.6
42.5°	17487.9	17563.4	18243.6	18985.7	19615.3	19798.4	20272.1	21607.9	21745.2	21782.3	20252.3
45°	17150.3	17244.3	18004.9	19205.9	20232.5	20820.0	21721.7	23024.1	23099.5	22994.4	21250.4
47.5°	16786.6	16886.8	17736.5	19140.4	20728.5	22008.6	23016.7	24357.4	24410.6	24087.8	22256.0
50°	16373.5	16466.3	17380.3	18987.0	21102.0	23130.5	24347.5	25510.2	25709.3	25071.1	23037.7
52.5°	15871.3	15970.3	16940.0	18747.0	21429.8	23962.9	25521.3	26812.6	26826.2	26300.5	23918.3
55°	15220.8	15392.7	16387.1	18331.4	21601.7	24677.8	26544.2	28535.5	28623.3	28115.0	24655.5
57.5°	14497.2	14646.9	15721.7	17777.3	21447.1	25220.7	28189.2	30383.4	30372.2	29351.8	25299.9
60°	13541.1	13647.5	14854.6	17052.5	20948.6	25877.5	29902.2	32363.6	32343.8	30564.0	25714.2
62.5°	12314.1	12420.5	13555.9	15915.9	20216.4	26317.8	31064.9	33846.6	33789.7	31445.8	25841.6
65°	10891.8	11082.2	12068.0	14440.3	18921.4	26028.4	31626.4	34719.8	34628.3	32118.7	25537.4
67.5°	9558.4	9720.5	10500.9	12409.4	17010.5	24854.6	31230.6	34944.9	34917.7	32216.4	24677.8
70°	7671.0	7730.4	8445.3	10079.1	14153.3	22341.3	29862.7	34425.4	34437.8	31316.0	22951.1
72.5°	5250.5	5395.2	5713.0	7003.1	10299.3	17767.4	25739.0	30982.0	30984.5	28080.4	19996.3
75°	2823.7	3047.6	3418.7	4058.1	5757.6	11401.3	20670.3	25708.1	25756.3	23412.5	15893.6
77.5°	1400.1	1480.5	1695.7	2170.7	2639.5	5379.1	13293.7	19297.4	19412.5	17971.5	10839.8
80°	640.7	654.3	670.4	666.7	1010.5	2359.9	5706.9	11589.3	11624.0	10688.9	4948.7
82.5°	500.9	498.5	505.9	460.1	462.6	910.3	1975.3	3035.2	3236.9	2547.9	1569.6
85°	303.0	301.8	325.3	252.3	310.5	492.3	996.9	1210.9	1225.7	996.9	812.6
87.5°	115.0	111.3	102.7	90.3	103.9	138.5	345.1	445.3	435.4	309.2	280.8
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°	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1	8580.1
2.5°	8613.5	8653.0	8726.0	8781.7	8800.2	8859.6	8916.5	8926.4	8967.2	8983.3	9036.5
5°	8721.1	8787.9	8901.7	8977.1	9010.5	9109.4	9173.8	9205.9	9194.8	9201.0	9260.3
7.5°	8878.2	8941.2	9032.8	9124.3	9140.4	9157.7	9151.5	9146.6	9103.3	9066.2	9121.8
10°	9021.6	9081.0	9137.9	9151.5	9069.9	9024.1	8942.5	8879.4	8795.3	8756.9	8801.5
12.5°	9223.2	9235.6	9179.9	9105.7	8930.1	8766.8	8634.5	8519.5	8415.6	8343.8	8403.2
15°	9436.0	9387.7	9225.7	9009.3	8737.2	8503.4	8286.9	8095.2	7923.3	7881.2	7897.3
17.5°	9718.0	9586.9	9260.3	8896.7	8473.7	8110.1	7831.8	7589.4	7364.2	7270.2	7261.6
20°	10061.8	9850.3	9330.8	8754.5	8162.0	7678.4	7248.0	6885.6	6575.1	6320.3	6326.5
22.5°	10509.6	10202.8	9437.2	8606.0	7816.9	7172.5	6546.7	5930.7	5419.9	5199.7	5145.3
25°	11100.8	10643.1	9588.1	8471.2	7431.0	6529.4	5645.0	4775.5	4235.0	4021.0	3997.5
27.5°	11836.7	11234.4	9818.2	8321.6	7017.9	5766.2	4494.7	3642.5	3146.6	2921.5	2846.0
30°	12672.8	11962.9	10054.4	8165.7	6518.2	4785.4	3427.3	2592.5	2084.1	1882.5	1856.5
32.5°	13755.1	12885.6	10405.7	7920.8	5788.5	3761.3	2390.8	1617.8	1272.7	1186.1	1161.4
35°	15292.5	14133.6	10839.8	7611.6	4851.0	2627.1	1481.8	947.4	763.1	719.9	711.2
37.5°	16726.0	15358.0	11277.7	7098.3	3683.4	1640.1	847.2	607.3	566.5	567.7	570.2
40°	17862.7	16195.4	11631.4	6423.0	2423.0	931.4	588.7	504.6	505.9	502.2	499.7
42.5°	18874.4	16863.3	11791.0	5424.9	1403.8	623.4	510.8	465.1	453.9	457.6	455.2
45°	19711.8	17544.8	11481.7	4303.0	827.5	559.1	482.4	431.7	419.3	439.1	441.6
47.5°	20592.4	18191.7	11008.0	3241.8	671.6	531.8	456.4	406.9	400.7	425.5	428.0
50°	21333.3	18660.5	10200.4	2442.8	640.7	502.2	432.9	382.2	381.0	403.2	403.2
52.5°	21953.0	18943.7	9241.8	1886.2	619.7	476.2	409.4	358.7	358.7	366.1	367.3
55°	22389.6	18886.8	8670.4	1484.2	597.4	451.5	384.7	336.4	321.6	316.6	319.1
57.5°	22468.7	18735.9	8007.4	1157.7	571.4	428.0	362.4	310.5	283.2	279.5	278.3
60°	22418.0	18404.4	7250.5	967.2	541.7	405.7	340.1	283.2	256.0	247.4	249.8
62.5°	22206.5	17816.9	6376.0	848.5	512.1	388.4	315.4	264.7	240.0	228.8	228.8
65°	21568.3	16975.9	5077.3	743.4	475.0	369.8	295.6	257.3	230.1	217.7	215.2
67.5°	20165.7	15230.7	3815.7	651.8	439.1	350.0	293.1	256.0	225.1	207.8	205.3
70°	18284.4	13083.5	2604.8	572.7	399.5	331.5	291.9	257.3	220.2	197.9	195.4
72.5°	15264.0	10314.1	1500.3	498.5	359.9	314.2	287.0	258.5	211.5	184.3	180.6
75°	11469.4	7234.4	880.6	428.0	321.6	288.2	273.3	251.1	197.9	168.2	164.5
77.5°	6897.9	3377.9	663.0	355.0	275.8	253.6	243.7	230.1	180.6	155.8	152.1
80°	2530.6	1282.6	520.7	284.5	218.9	220.2	210.3	201.6	164.5	143.5	141.0
82.5°	1103.3	784.2	384.7	216.4	171.9	196.7	173.2	165.7	141.0	128.6	123.7
85°	669.1	467.5	247.4	147.2	118.7	133.6	121.2	127.4	108.8	101.4	97.7
87.5°	221.4	139.8	110.1	71.7	59.4	55.7	54.4	65.6	61.8	56.9	56.9
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)