

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: P510558

Luminaire Tested: **CST-CA10-630-750-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510558
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-CA10-630-750-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 87632 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

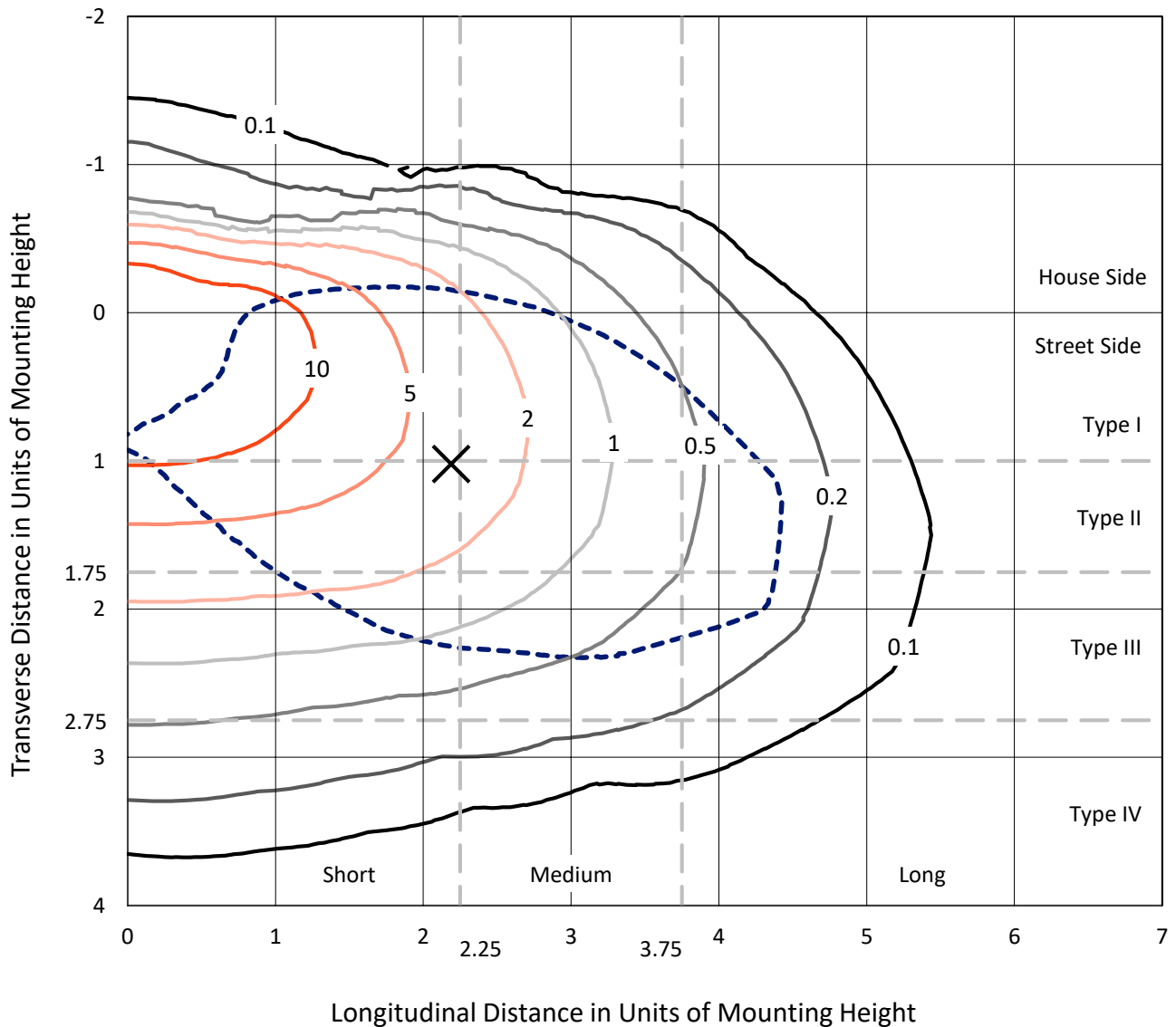
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510558
 CATALOG NUMBER: CST-CA10-630-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

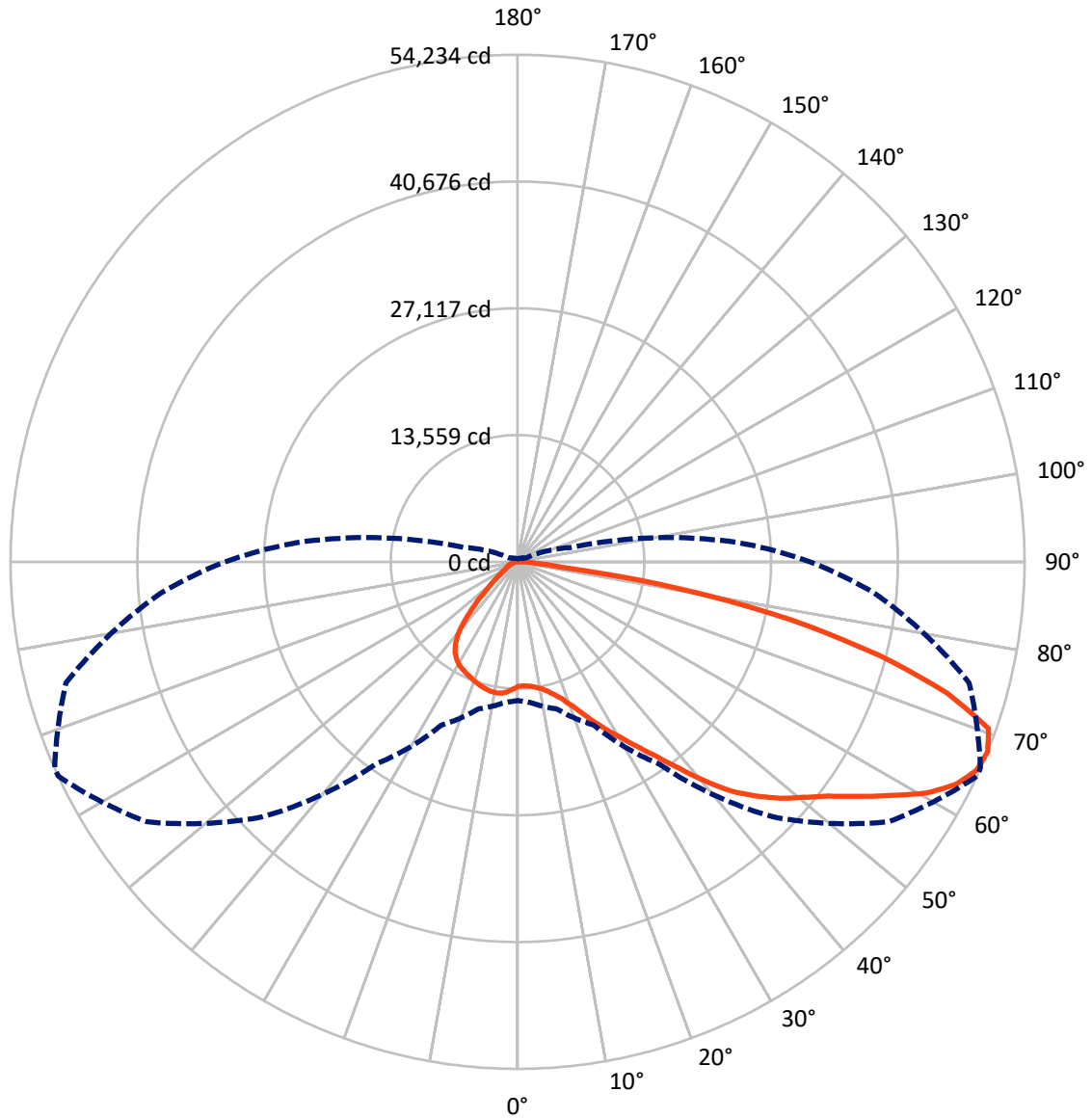
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.4 fc
 Type III - Short - N/A

REPORT NUMBER: P510558
CATALOG NUMBER: CST-CA10-630-750-U-T3-HSS

Luminous Intensity Polar Plot



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

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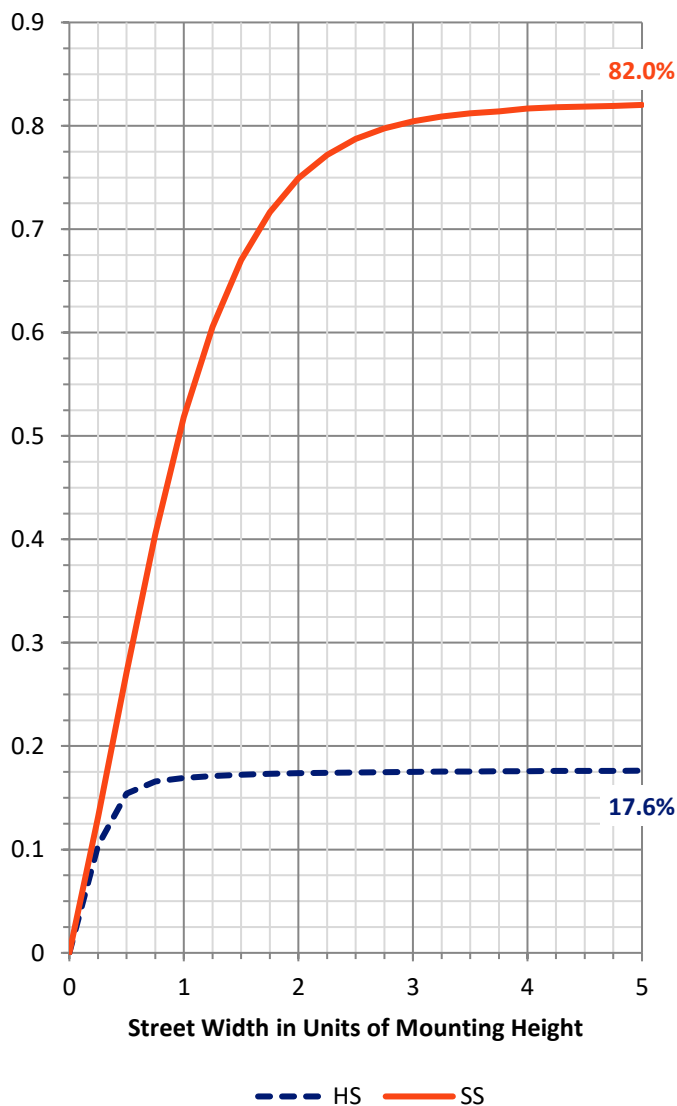
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15662.0	0.0	15662.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	71970.0	0.0	71970.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	87632.0	0.0	87632.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1317.4	1.5
10°-20°	4067.4	4.6
20°-30°	7056.0	8.1
30°-40°	10643.9	12.1
40°-50°	14758.5	16.8
50°-60°	18217.5	20.8
60°-70°	19410.4	22.1
70°-80°	11107.0	12.7
80°-90°	1053.8	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°	87632.0	100.0
0°-180°	87632.0	100.0

Coefficient of Utilization

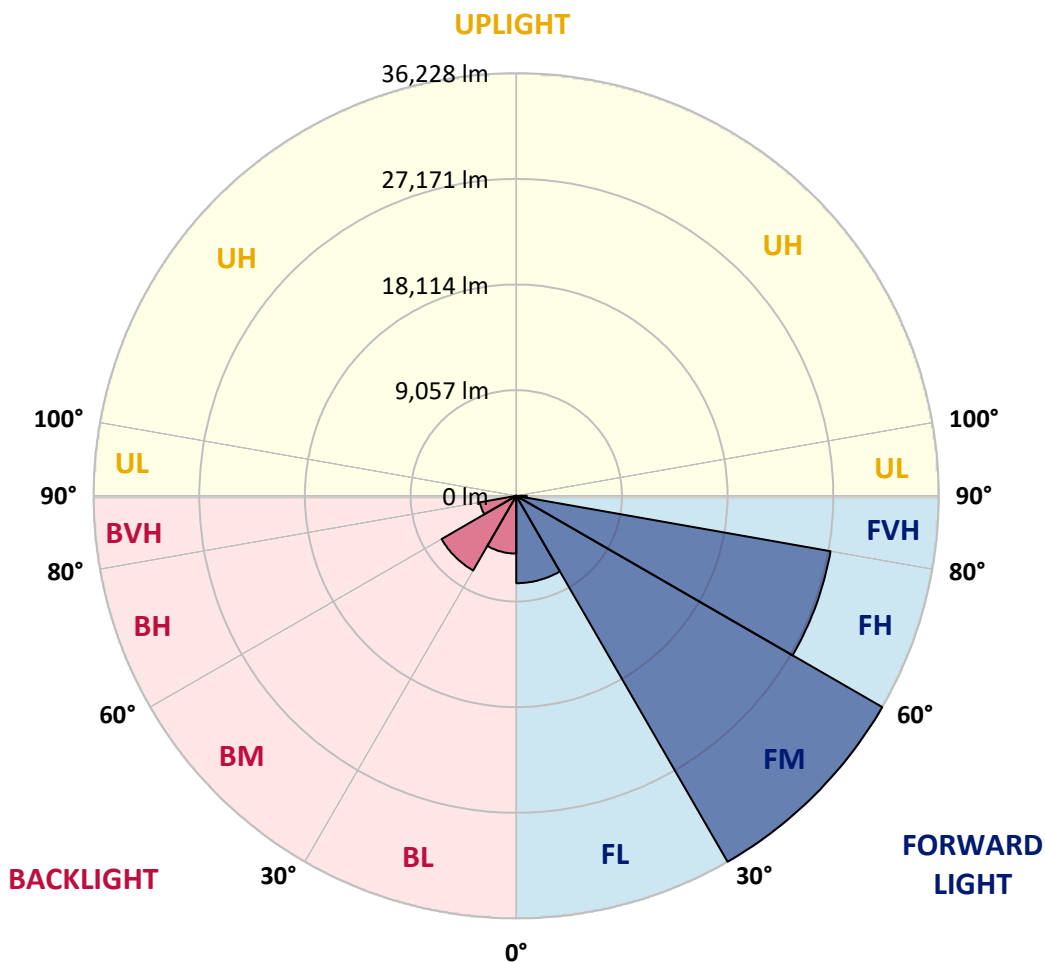


REPORT NUMBER: P510558
 CATALOG NUMBER: CST-CA10-630-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7484.9	8.5			
FM (30°-60°)	36228.3	41.3			
FH (60°-80°)	27356.3	31.2			G5
FVH (80°-90°)	900.5	1.0			G5
BL (0°-30°)	4955.9	5.7	B4/5000		
BM (30°-60°)	7391.6	8.4	B4/8500		
BH (60°-80°)	3161.1	3.6	B4/5000		G4/5000
BVH (80°-90°)	153.4	0.2			G2/225
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: P510558

CATALOG NUMBER: CST-CA10-630-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3
2.5°	13187.6	13170.4	13155.0	13181.9	13197.2	13222.2	13258.7	13283.6	13291.3	13314.3	13343.1
5°	13398.8	13396.9	13375.8	13364.2	13331.6	13320.1	13327.8	13358.5	13360.4	13389.2	13479.4
7.5°	13813.4	13809.6	13757.8	13734.7	13665.6	13588.8	13531.2	13537.0	13535.1	13563.9	13684.8
10°	14439.2	14408.5	14335.6	14264.5	14130.2	13986.2	13880.6	13784.6	13784.6	13826.9	13961.2
12.5°	15145.6	15187.9	15088.0	14980.5	14756.0	14496.8	14312.5	14205.0	14193.5	14214.6	14310.6
15°	16022.9	16022.9	15955.7	15802.1	15604.4	15243.5	14863.5	14727.2	14708.0	14752.1	14746.4
17.5°	17011.5	17040.3	16913.6	16836.8	16533.5	16134.2	15658.2	15422.1	15422.1	15393.3	15260.8
20°	18272.7	18115.3	18128.7	18002.0	17779.3	17199.6	16715.9	16372.3	16368.4	16310.8	15938.4
22.5°	19643.3	19556.9	19482.0	19370.7	19063.5	18545.2	17873.4	17533.6	17525.9	17383.9	16831.0
25°	20994.6	21059.9	20977.4	20773.9	20549.3	19984.9	19244.0	18910.0	18908.0	18671.9	17888.7
27.5°	22384.4	22455.5	22428.6	22244.3	21944.8	21503.3	20802.7	20366.9	20340.1	20186.5	19201.7
30°	23920.1	23856.8	23939.3	23860.6	23710.9	22991.0	22357.6	21850.8	21916.1	21870.0	20693.3
32.5°	25037.3	25077.6	25348.3	25356.0	25198.6	24664.9	23891.3	23580.3	23684.0	23622.6	22526.5
35°	26047.0	26112.3	26461.7	26805.3	26920.4	26336.9	25549.9	25530.7	25665.0	26039.4	25052.7
37.5°	26914.7	26960.8	27450.3	27897.5	28269.9	27870.6	27298.6	27980.1	28177.8	28943.7	27659.5
40°	27434.9	27494.4	28127.9	28757.5	29421.7	29279.6	29225.9	30838.3	31024.5	31698.3	29561.8
42.5°	27141.2	27258.3	28314.1	29465.8	30442.9	30727.0	31462.2	33535.4	33748.5	33806.0	31431.5
45°	26617.2	26763.0	27943.6	29807.5	31400.8	32312.6	33712.0	35733.3	35850.4	35687.3	32980.6
47.5°	26052.8	26208.3	27527.0	29705.8	32170.5	34157.3	35721.8	37802.7	37885.2	37384.2	34541.3
50°	25411.6	25555.6	26974.2	29467.8	32750.3	35898.4	37787.3	39591.7	39900.8	38910.3	35754.4
52.5°	24632.3	24785.9	26290.8	29095.4	33259.0	37190.3	39609.0	41613.1	41634.2	40818.3	37121.2
55°	23622.6	23889.4	25432.8	28450.4	33525.8	38299.8	41196.5	44287.1	44423.3	43634.4	38265.3
57.5°	22499.6	22731.9	24400.0	27590.4	33285.8	39142.5	43749.6	47154.9	47137.7	45554.0	39265.4
60°	21015.8	21180.8	23054.4	26465.5	32512.2	40161.8	46408.2	50228.2	50197.5	47435.2	39908.5
62.5°	19111.5	19276.6	21038.8	24701.4	31375.8	40845.2	48212.6	52529.8	52441.5	48803.9	40106.2
65°	16904.0	17199.6	18729.5	22411.3	29366.0	40396.0	49084.1	53885.0	53743.0	49848.1	39633.9
67.5°	14834.7	15086.1	16297.4	19259.3	26400.2	38574.3	48469.9	54234.4	54192.2	49999.8	38299.8
70°	11905.3	11997.5	13107.0	15642.8	21966.0	34673.7	46346.8	53428.2	53447.4	48602.3	35620.1
72.5°	8148.7	8373.3	8866.6	10868.8	15984.5	27575.0	39946.8	48084.0	48087.9	43580.6	31034.1
75°	4382.4	4729.9	5305.8	6298.2	8935.7	17694.9	32080.3	39898.9	39973.7	36336.1	24666.8
77.5°	2173.0	2297.8	2631.8	3368.9	4096.4	8348.3	20631.8	29949.6	30128.1	27891.8	16823.4
80°	994.4	1015.5	1040.4	1034.7	1568.3	3662.6	8857.0	17986.6	18040.4	16589.2	7680.3
82.5°	777.4	773.6	785.1	714.1	717.9	1412.8	3065.6	4710.7	5023.6	3954.4	2436.0
85°	470.3	468.4	504.9	391.6	481.8	764.0	1547.2	1879.3	1902.3	1547.2	1261.2
87.5°	178.5	172.8	159.3	140.1	161.2	215.0	535.6	691.1	675.7	479.9	435.7
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: P510558

CATALOG NUMBER: CST-CA10-630-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3	13316.3
2.5°	13368.1	13429.5	13542.8	13629.1	13657.9	13750.1	13838.4	13853.7	13917.1	13942.0	14024.6
5°	13535.1	13638.7	13815.3	13932.4	13984.3	14137.8	14237.7	14287.6	14270.3	14279.9	14372.0
7.5°	13778.9	13876.8	14018.8	14160.9	14185.8	14212.7	14203.1	14195.4	14128.2	14070.7	14157.0
10°	14001.6	14093.7	14182.0	14203.1	14076.4	14005.4	13878.7	13780.8	13650.3	13590.8	13659.9
12.5°	14314.4	14333.6	14247.3	14132.1	13859.5	13606.1	13400.7	13222.2	13060.9	12949.6	13041.8
15°	14644.6	14569.8	14318.3	13982.4	13560.0	13197.2	12861.3	12563.8	12296.9	12231.7	12256.6
17.5°	15082.3	14878.8	14372.0	13807.7	13151.2	12586.8	12154.9	11778.7	11429.3	11283.4	11270.0
20°	15615.9	15287.7	14481.5	13586.9	12667.4	11916.9	11248.8	10686.4	10204.6	9809.1	9818.7
22.5°	16310.8	15834.8	14646.5	13356.6	12131.9	11131.8	10160.4	9204.5	8411.7	8070.0	7985.5
25°	17228.4	16518.1	14880.7	13147.3	11532.9	10133.6	8761.0	7411.6	6572.7	6240.6	6204.1
27.5°	18370.6	17435.7	15237.8	12915.1	10891.8	8949.2	6975.8	5653.2	4883.5	4534.1	4417.0
30°	19668.2	18566.4	15604.4	12673.2	10116.3	7426.9	5319.2	4023.5	3234.5	2921.6	2881.3
32.5°	21347.9	19998.4	16149.6	12293.1	8983.7	5837.5	3710.6	2510.8	1975.3	1840.9	1802.5
35°	23733.9	21935.3	16823.4	11813.2	7528.7	4077.2	2299.7	1470.4	1184.4	1117.2	1103.8
37.5°	25958.7	23835.7	17502.9	11016.6	5716.6	2545.4	1314.9	942.5	879.2	881.1	884.9
40°	27722.8	25135.2	18051.9	9968.5	3760.5	1445.5	913.7	783.2	785.1	779.4	775.5
42.5°	29293.1	26171.8	18299.5	8419.4	2178.7	967.5	792.8	721.8	704.5	710.3	706.4
45°	30592.6	27229.5	17819.6	6678.3	1284.2	867.7	748.6	669.9	650.7	681.5	685.3
47.5°	31959.4	28233.5	17084.4	5031.3	1042.3	825.4	708.3	631.5	621.9	660.3	664.2
50°	33109.2	28961.0	15830.9	3791.2	994.4	779.4	671.9	593.2	591.2	625.8	625.8
52.5°	34071.0	29400.6	14343.2	2927.4	961.7	739.0	635.4	556.7	556.7	568.2	570.1
55°	34748.6	29312.3	13456.4	2303.5	927.2	700.7	597.0	522.1	499.1	491.4	495.3
57.5°	34871.4	29078.1	12427.5	1796.7	886.9	664.2	562.4	481.8	439.6	433.8	431.9
60°	34792.7	28563.6	11252.7	1501.1	840.8	629.6	527.9	439.6	397.4	383.9	387.8
62.5°	34464.5	27651.8	9895.5	1316.8	794.7	602.8	489.5	410.8	372.4	355.1	355.1
65°	33474.0	26346.5	7880.0	1153.7	737.1	574.0	458.8	399.3	357.0	337.8	334.0
67.5°	31297.1	23637.9	5922.0	1011.6	681.5	543.2	454.9	397.4	349.4	322.5	318.7
70°	28377.4	20305.5	4042.7	888.8	620.0	514.5	453.0	399.3	341.7	307.1	303.3
72.5°	23689.8	16007.5	2328.5	773.6	558.6	487.6	445.3	401.2	328.3	286.0	280.3
75°	17800.4	11227.7	1366.8	664.2	499.1	447.3	424.2	389.7	307.1	261.1	255.3
77.5°	10705.6	5242.4	1028.9	550.9	428.1	393.5	378.2	357.0	280.3	241.9	236.1
80°	3927.5	1990.6	808.2	441.5	339.8	341.7	326.3	312.9	255.3	222.7	218.8
82.5°	1712.3	1217.0	597.0	335.9	266.8	305.2	268.7	257.2	218.8	199.6	192.0
85°	1038.5	725.6	383.9	228.4	184.3	207.3	188.1	197.7	168.9	157.4	151.6
87.5°	343.6	216.9	170.8	111.3	92.1	86.4	84.5	101.7	96.0	88.3	88.3
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)