

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: P510589

Luminaire Tested: **CST-CA10-760-727-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510589
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-CA10-760-727-U-T3
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: 90393 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

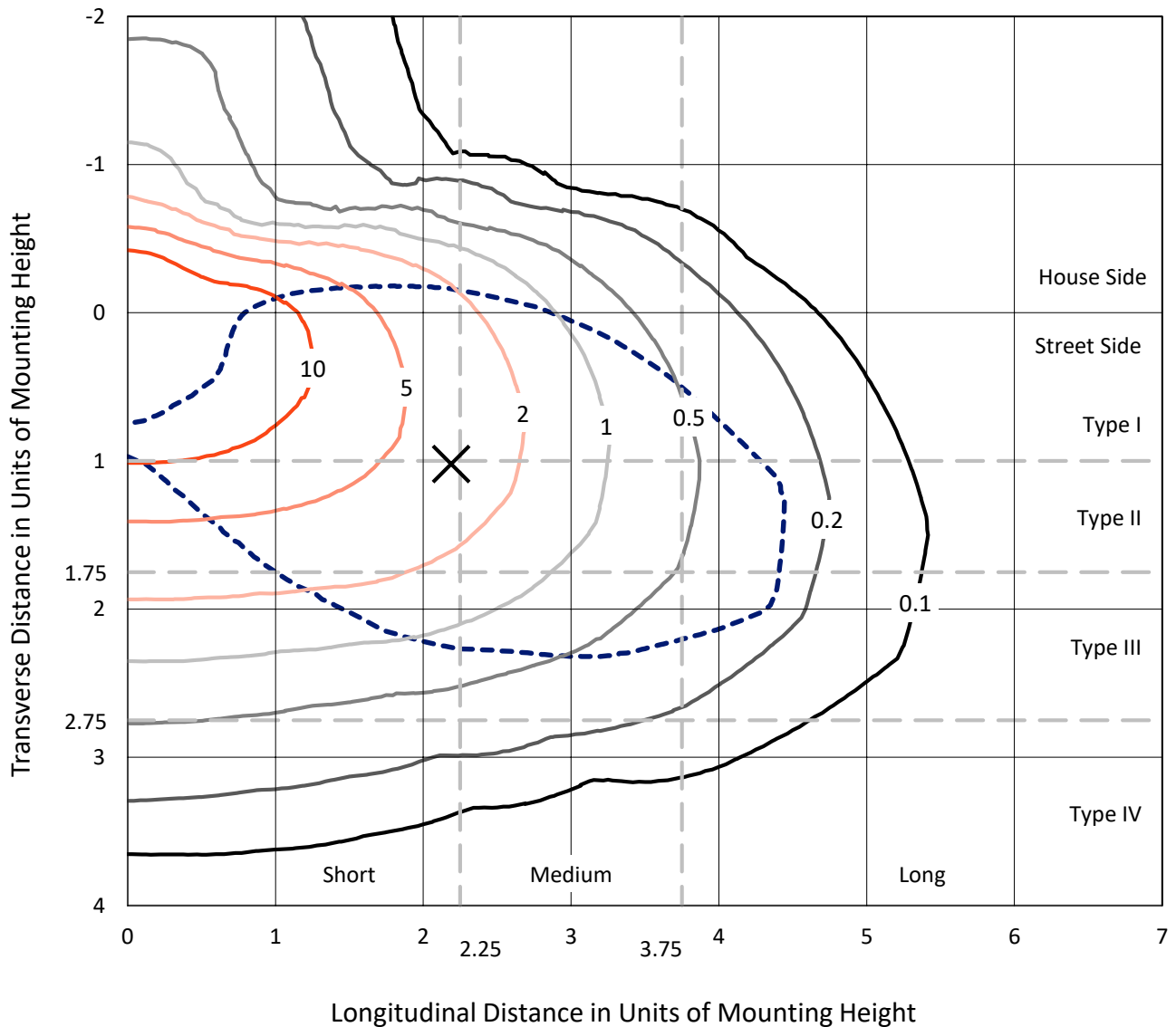
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

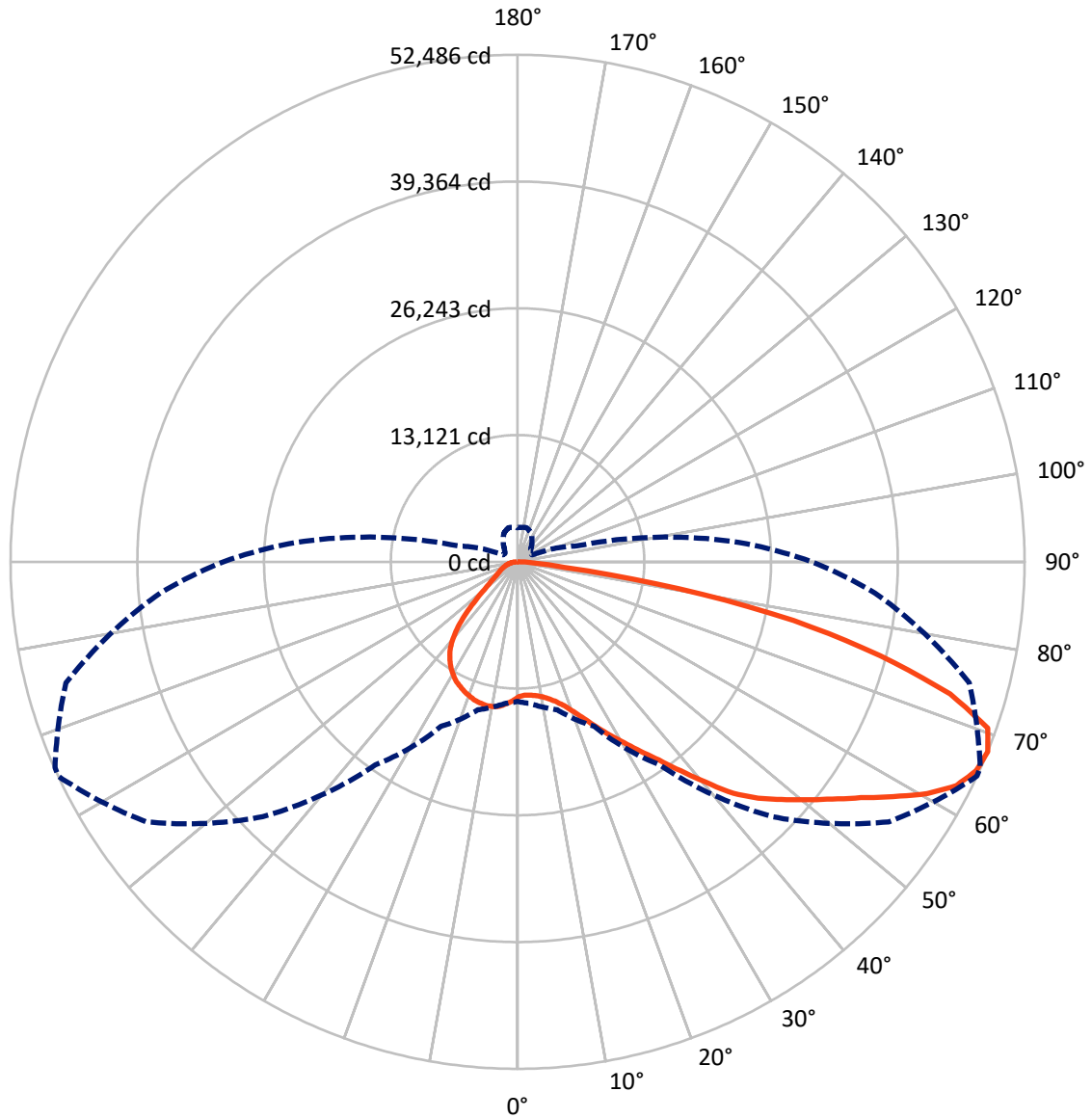
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.3 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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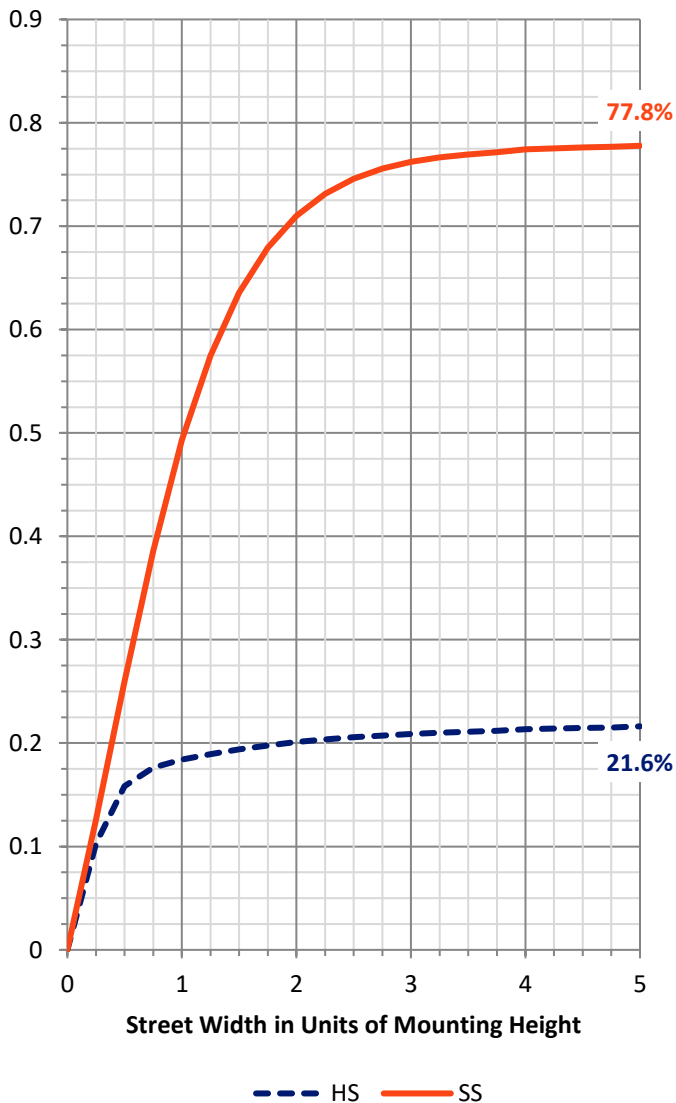
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19966.7	0.0	19966.7
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	70426.3	0.0	70426.3
	% Fixture	77.9	0.0	77.9
Total	Lumens	90393.0	0.0	90393.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1391.1	1.5
10°-20°	4346.4	4.8
20°-30°	7524.1	8.3
30°-40°	11055.9	12.2
40°-50°	14943.4	16.5
50°-60°	18375.9	20.3
60°-70°	19691.0	21.8
70°-80°	11613.5	12.8
80°-90°	1451.7	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°	90393.0	100.0
0°-180°	90393.0	100.0

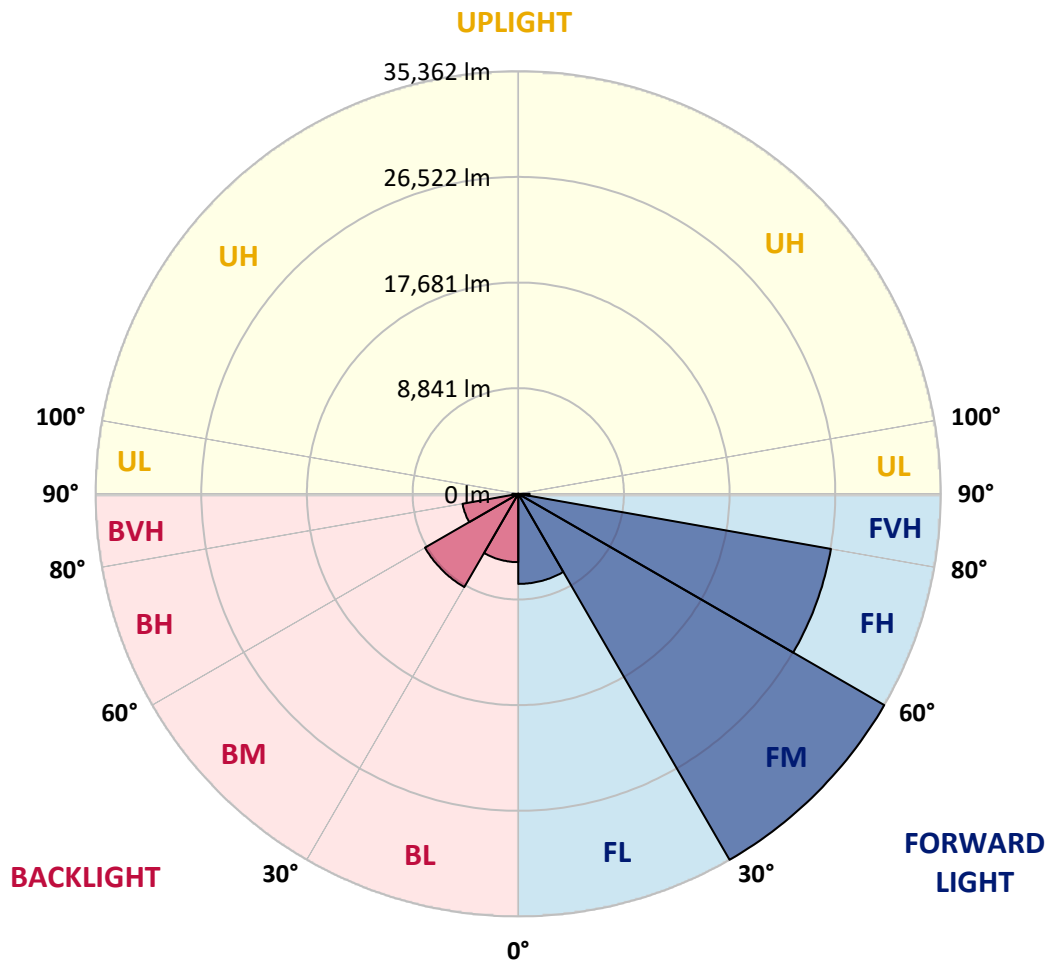


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7542.6	8.3			
FM (30°-60°)	35362.4	39.1			
FH (60°-80°)	26569.5	29.4			G5
FVH (80°-90°)	951.9	1.1			G5
BL (0°-30°)	5719.0	6.3	B5		
BM (30°-60°)	9012.9	10.0	B5		
BH (60°-80°)	4735.0	5.2	B4/5000		G4/5000
BVH (80°-90°)	499.7	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3
2.5°	13698.7	13672.9	13661.9	13696.9	13722.7	13752.2	13794.6	13835.1	13840.7	13894.1	13964.1
5°	13864.6	13842.5	13818.5	13813.0	13803.8	13802.0	13813.0	13859.1	13870.1	13921.7	14072.9
7.5°	14233.2	14211.1	14166.9	14150.3	14100.5	14012.1	13969.7	13993.6	13999.2	14061.8	14249.8
10°	14834.0	14765.8	14712.4	14657.1	14500.4	14360.4	14257.2	14212.9	14203.7	14264.5	14482.0
12.5°	15550.9	15493.8	15434.8	15289.2	15090.2	14837.7	14655.2	14553.9	14546.5	14598.1	14762.1
15°	16308.4	16308.4	16267.8	16094.6	15899.2	15480.9	15198.9	15029.4	15040.4	15081.0	15156.5
17.5°	17287.0	17205.9	17187.5	16990.3	16772.8	16391.3	15943.5	15672.6	15685.5	15703.9	15646.8
20°	18282.2	18258.2	18230.6	18099.7	17902.5	17412.3	16909.2	16553.5	16555.3	16489.0	16234.7
22.5°	19598.1	19518.8	19539.1	19391.7	19124.4	18621.3	18042.6	17620.6	17648.2	17552.4	17091.6
25°	20904.7	20825.5	20783.1	20683.6	20453.2	19975.9	19288.5	18901.4	18868.3	18695.0	18026.0
27.5°	22209.6	22163.5	22198.5	22078.7	21890.7	21358.1	20727.8	20298.4	20320.5	20200.7	19203.7
30°	23560.4	23508.8	23661.8	23468.3	23352.2	22834.3	22229.8	21724.9	21743.3	21787.5	20668.8
32.5°	24579.6	24640.4	24907.7	24885.5	24863.4	24286.6	23650.8	23370.6	23398.3	23553.1	22408.6
35°	25563.7	25569.3	25945.2	26229.1	26348.8	25866.0	25206.2	25197.0	25377.6	25849.4	24833.9
37.5°	26380.2	26361.8	26863.0	27303.5	27631.6	27257.4	26894.4	27460.2	27624.2	28602.8	27275.9
40°	26826.2	26864.9	27509.9	28059.1	28704.2	28527.2	28565.9	30012.7	30416.3	31273.2	29102.2
42.5°	26512.9	26630.8	27635.2	28755.8	29728.8	29964.7	30742.5	32769.7	32941.1	33095.9	30899.1
45°	25987.6	26111.1	27224.3	29034.0	30574.8	31571.8	32908.0	34891.0	35079.0	34905.7	32393.8
47.5°	25440.3	25567.4	26807.7	28921.6	31275.1	33186.2	34833.9	36767.1	37006.7	36470.4	33831.3
50°	24745.5	24942.7	26299.1	28683.9	31842.7	34927.8	36656.5	38698.5	38809.1	38035.1	34920.5
52.5°	23890.3	24107.8	25574.8	28276.6	32286.9	36144.2	38501.4	40794.0	40782.9	39863.3	36166.3
55°	22991.0	23188.2	24699.4	27635.2	32535.7	37080.4	39975.7	43103.2	43235.9	42465.6	37294.2
57.5°	21839.1	22017.9	23665.5	26772.7	32277.7	37874.7	42364.2	45847.4	45913.8	44277.2	38191.7
60°	20313.1	20576.7	22231.7	25676.2	31536.8	38794.4	44996.0	48733.5	48814.6	46059.3	38768.6
62.5°	18637.9	18742.9	20429.3	23988.0	30458.7	39503.9	46820.5	50991.1	50873.2	47452.6	38941.8
65°	16595.9	16678.8	18138.4	21817.0	28455.4	39115.1	47474.7	52152.2	52006.6	48328.0	38409.2
67.5°	14458.0	14714.2	15860.5	18805.6	25659.6	37320.0	46921.9	52485.8	52412.0	48394.4	37137.6
70°	11682.5	11772.9	12808.6	15320.6	21409.7	33726.2	45078.9	51630.6	51573.5	46912.6	34540.8
72.5°	8238.0	8149.6	8652.7	10622.8	15464.3	26828.0	38488.5	46826.0	46921.9	41966.1	30079.0
75°	4373.4	4542.9	5326.2	6503.8	8767.0	17246.5	30685.3	38753.8	38720.7	35091.9	23776.1
77.5°	2329.5	2325.8	2864.0	3367.1	4292.3	7924.7	20239.4	29225.7	29387.9	27189.2	16325.0
80°	1118.7	1161.1	1194.2	1369.3	2139.7	3662.0	8466.6	16947.9	18053.7	16216.2	7755.2
82.5°	895.7	899.4	903.1	864.3	884.6	1491.0	3262.0	4904.1	5081.1	4084.0	2500.9
85°	663.5	622.9	617.4	523.4	591.6	895.7	1645.8	2093.6	1990.4	1937.0	1411.7
87.5°	267.2	250.6	243.3	228.5	228.5	337.3	580.5	757.5	755.6	689.3	473.6
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°	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3	13962.3
2.5°	14019.4	14085.8	14240.6	14373.3	14423.0	14544.7	14658.9	14725.3	14771.4	14799.0	14924.3
5°	14165.0	14297.7	14544.7	14730.8	14911.4	15136.3	15281.9	15374.0	15425.6	15455.1	15545.4
7.5°	14388.0	14522.6	14784.3	15069.9	15235.8	15420.1	15514.1	15580.4	15613.6	15604.4	15676.2
10°	14587.1	14719.7	14981.5	15200.8	15294.8	15399.8	15449.6	15464.3	15466.2	15473.5	15545.4
12.5°	14858.0	14939.1	15079.1	15222.9	15202.6	15206.3	15248.7	15230.3	15187.9	15180.5	15228.4
15°	15149.2	15151.0	15162.1	15130.7	15003.6	14948.3	14889.3	14839.5	14723.4	14716.1	14791.6
17.5°	15514.1	15427.4	15226.6	15012.8	14710.5	14502.3	14292.2	14205.6	14063.7	14036.0	14072.9
20°	15984.0	15803.4	15315.0	14784.3	14218.5	13846.2	13591.9	13335.7	13138.5	13090.6	13125.6
22.5°	16658.5	16302.9	15427.4	14541.0	13665.6	13029.8	12535.8	12228.1	11896.3	11726.8	11743.4
25°	17473.1	16916.6	15622.8	14233.2	13015.0	12097.2	11295.5	10678.1	10304.0	10055.2	10121.6
27.5°	18540.2	17775.4	15856.9	13929.1	12205.9	10904.8	9741.9	8905.2	8523.7	8405.8	8328.4
30°	19776.8	18813.0	16103.8	13479.4	11332.4	9428.6	7939.5	7242.8	6806.1	6736.0	6677.1
32.5°	21431.8	20119.6	16566.4	12991.1	10289.3	7952.4	6336.1	5534.4	5434.9	5377.8	5364.9
35°	23566.0	21831.7	17051.1	12357.1	8929.2	6221.8	4793.5	4360.5	4312.5	4375.2	4380.7
37.5°	25831.0	23689.5	17631.6	11642.0	7364.5	4642.4	3667.5	3367.1	3420.5	3615.9	3660.1
40°	27364.3	24913.2	18158.7	10670.8	5431.2	3372.6	2668.6	2604.1	2899.0	3149.6	3201.2
42.5°	28835.0	25840.2	18372.5	9386.2	3873.9	2401.4	2154.4	2375.6	2788.4	3063.0	3099.9
45°	30090.1	26918.3	17834.4	7845.5	2626.2	2007.0	2064.1	2370.1	2828.9	3133.0	3160.7
47.5°	31284.3	27799.3	17099.0	6181.3	2071.5	1931.4	2062.3	2419.8	2919.3	3206.8	3223.3
50°	32425.1	28470.1	15844.0	4703.2	1940.6	1896.4	2078.9	2497.2	2969.0	3149.6	3142.3
52.5°	33271.0	28816.6	14507.8	3796.5	1889.0	1868.8	2123.1	2594.9	2978.2	3087.0	3079.6
55°	33892.1	28750.2	13630.6	3109.1	1846.6	1857.7	2195.0	2668.6	3066.7	3230.7	3225.2
57.5°	33949.2	28449.8	12633.5	2626.2	1795.0	1855.9	2272.4	2771.8	3509.0	3811.2	3719.1
60°	33881.0	27952.2	11638.3	2305.5	1737.9	1866.9	2353.5	3081.4	4146.7	4384.4	4319.9
62.5°	33545.6	27025.2	10147.4	2093.6	1688.2	1907.5	2414.3	3326.5	4115.3	4143.0	4050.8
65°	32509.9	25784.9	8190.1	1879.8	1638.4	1935.1	2464.0	3391.1	3779.9	3691.5	3645.4
67.5°	30460.5	23014.9	6317.7	1684.5	1573.9	1929.6	2611.5	3298.9	3652.8	3588.3	3529.3
70°	27548.6	19867.1	4386.3	1483.6	1465.2	1894.6	2574.6	3330.2	3591.9	3492.4	3413.2
72.5°	23014.9	15585.9	2790.2	1319.6	1303.0	1811.6	2482.5	3310.0	3551.4	3507.2	3398.4
75°	17329.4	10879.0	1772.9	1140.8	1159.2	1660.5	2335.0	3201.2	3531.1	3392.9	3184.6
77.5°	10910.3	5370.4	1378.5	969.4	997.0	1432.0	2018.0	2795.8	3389.2	3306.3	3039.0
80°	4126.4	2180.2	1078.1	786.9	810.9	1113.1	1655.0	2300.0	3120.1	3256.5	3142.3
82.5°	1900.1	1363.8	809.1	632.1	641.4	810.9	1234.8	1702.9	2641.0	2989.3	3274.9
85°	1109.5	893.8	540.0	422.0	438.6	479.2	694.8	1039.4	1712.1	2279.7	2550.7
87.5°	377.8	311.5	210.1	178.8	173.2	197.2	167.7	340.9	508.7	895.7	1022.8
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)