

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: McGRAW-EDISON

Report Number: P591032

Luminaire Tested: **CTN-CA10-760-727-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

Test Information

Test Method: LM-79-08
Report Number: P591032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 12/14/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-727-U-T3-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 82117 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

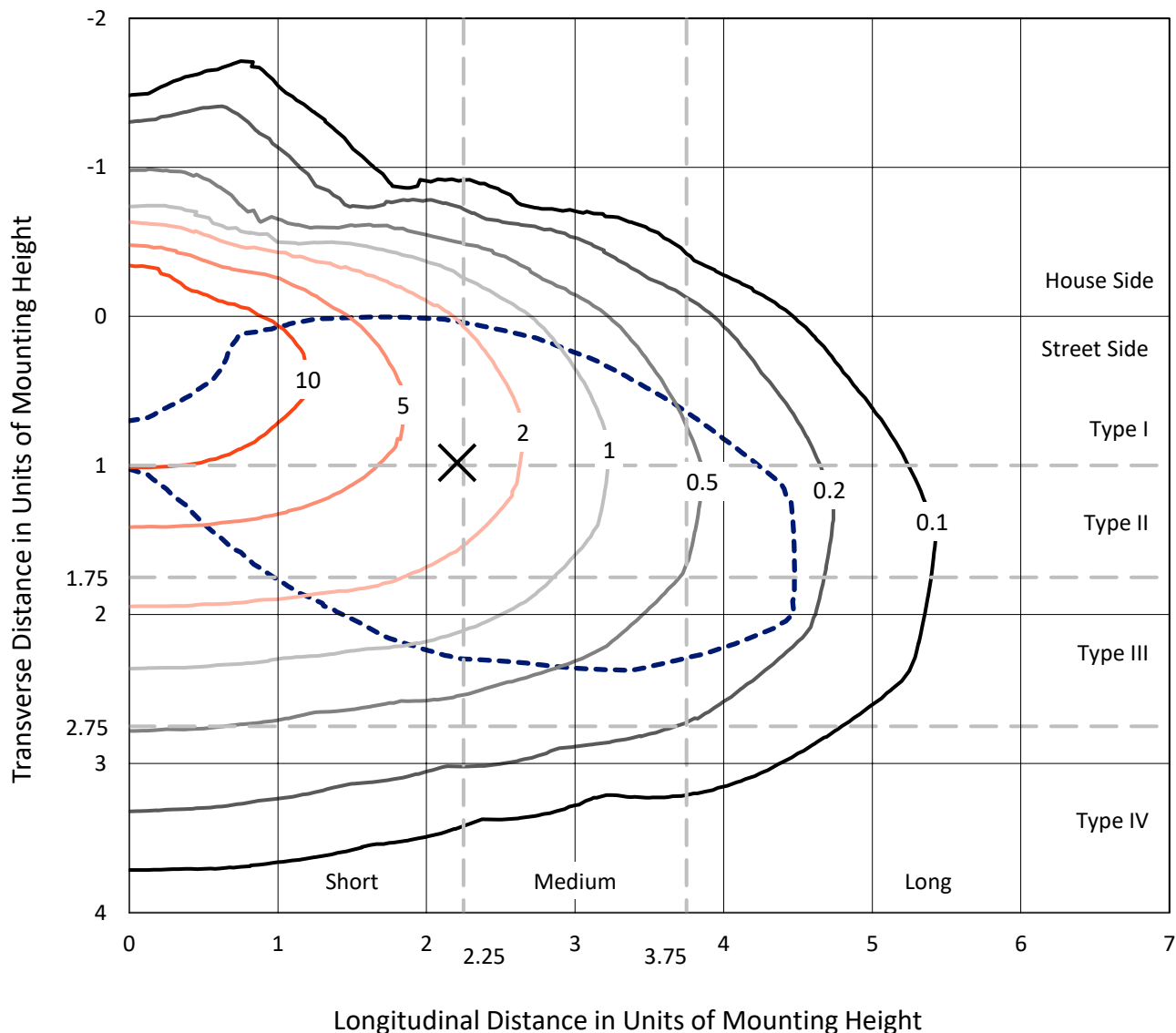
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

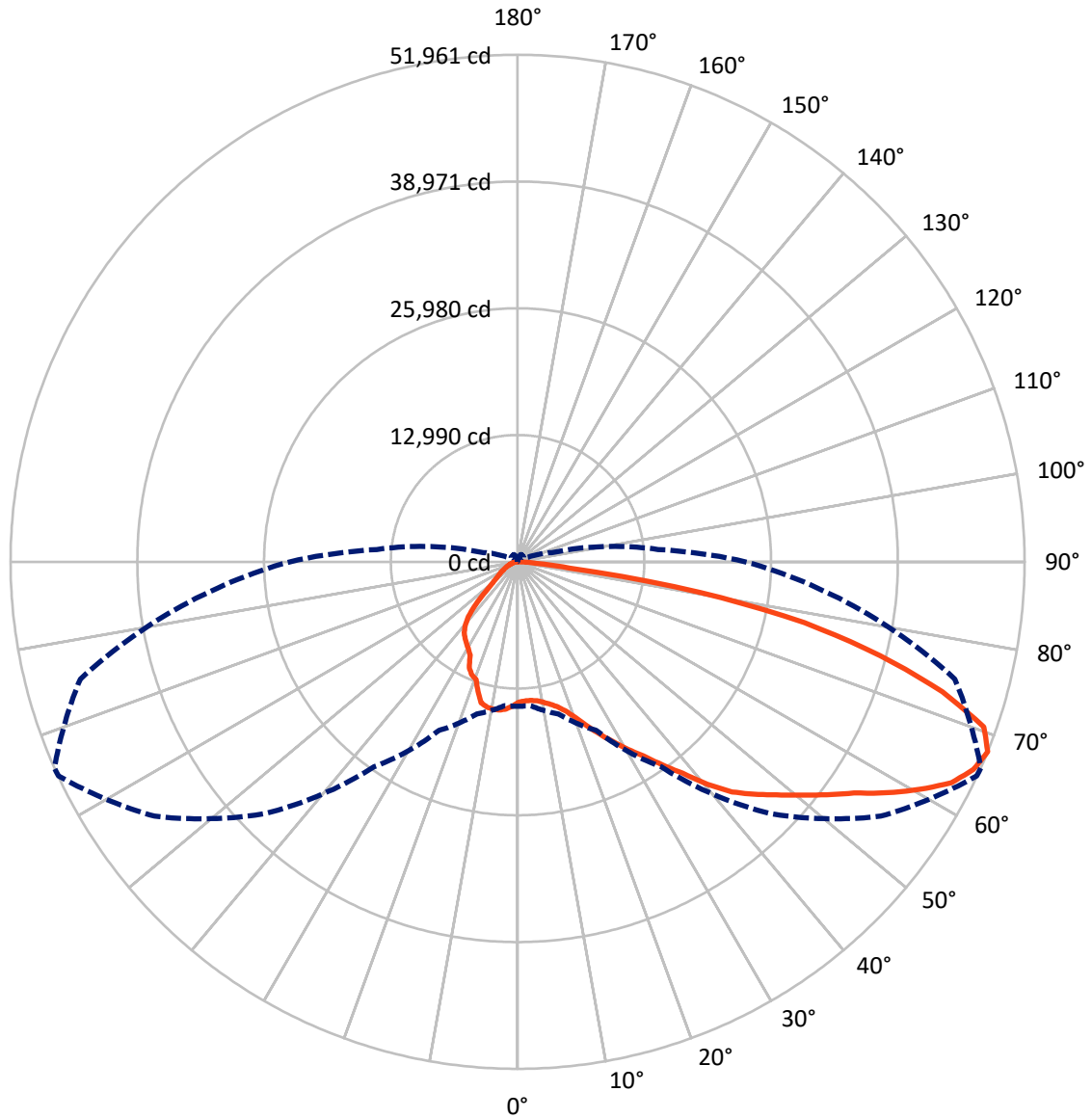
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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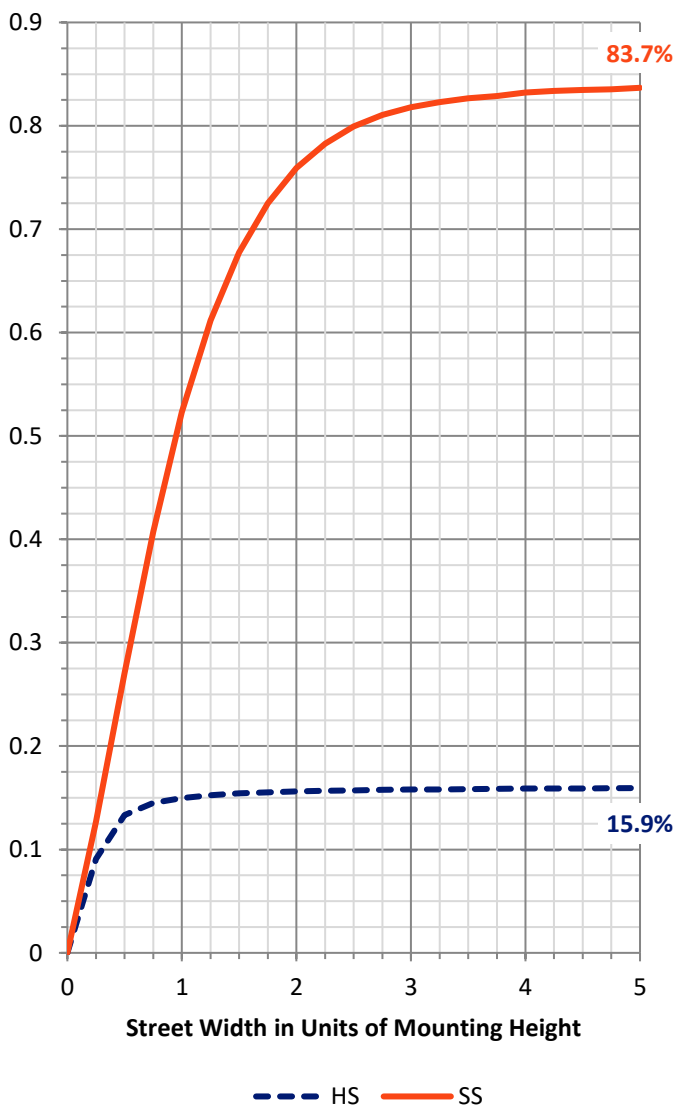
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13255.4	0.0	13255.4
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	68861.6	0.0	68861.6
	% Fixture	83.9	0.0	83.9
Total	Lumens	82117.0	0.0	82117.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1424.8	1.7
10°-20°	4295.9	5.2
20°-30°	6983.3	8.5
30°-40°	10200.7	12.4
40°-50°	13586.4	16.5
50°-60°	16435.1	20.0
60°-70°	17595.6	21.4
70°-80°	10442.3	12.7
80°-90°	1153.0	1.4
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°	82117.0	100.0
0°-180°	82117.0	100.0

Coefficient of Utilization

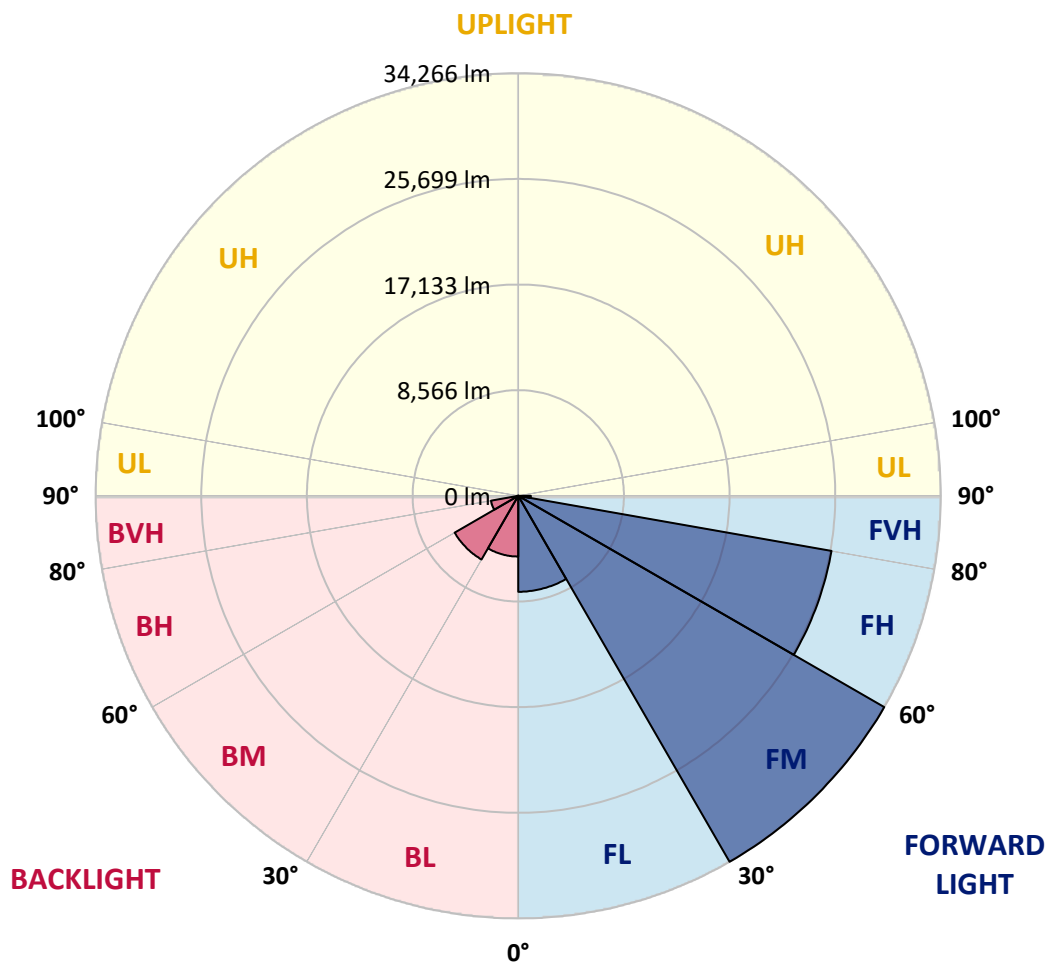


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7781.1	9.5			
FM (30°-60°)	34265.9	41.7			
FH (60°-80°)	25792.5	31.4			G5
FVH (80°-90°)	1022.1	1.2			G5
BL (0°-30°)	4922.9	6.0	B4/5000		
BM (30°-60°)	5956.3	7.3	B4/8500		
BH (60°-80°)	2245.3	2.7	B3/2500		G3/2500
BVH (80°-90°)	130.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3
2.5°	14194.4	14114.2	14150.5	14244.9	14063.8	14178.9	14097.4	14239.7	14278.5	14294.0	14350.9
5°	14472.4	14366.4	14369.0	14428.5	14222.9	14273.3	14134.9	14234.5	14265.5	14306.9	14445.3
7.5°	14959.9	14842.3	14831.9	14847.4	14591.4	14534.5	14339.2	14359.9	14383.2	14407.8	14587.5
10°	15629.8	15509.5	15488.8	15448.7	15111.2	14962.5	14672.9	14627.6	14649.6	14609.5	14822.9
12.5°	16434.1	16289.3	16213.0	16097.9	15707.4	15474.6	15091.8	14967.7	14987.1	14903.0	15051.8
15°	17279.8	17125.9	17084.5	16907.4	16426.3	16108.2	15613.0	15424.2	15429.3	15332.4	15325.9
17.5°	18182.4	18045.3	18011.7	17899.2	17366.4	16987.5	16375.9	16119.9	16100.5	16004.8	15720.3
20°	19206.5	19119.9	19101.8	19037.1	18554.8	18111.2	17415.5	17071.6	17052.2	16900.9	16293.1
22.5°	20466.0	20363.8	20309.5	20253.9	19893.1	19431.5	18684.1	18199.2	18275.5	18020.7	17036.7
25°	21719.0	21637.5	21591.0	21554.8	21257.4	20820.3	20063.8	19494.9	19571.2	19298.3	17940.5
27.5°	22963.0	22783.2	22858.2	22943.6	22646.2	22298.3	21475.9	20856.5	20879.8	20585.0	19022.9
30°	24119.0	24024.6	24153.9	24234.1	24016.9	23745.3	22881.5	22282.8	22317.7	21967.3	20264.3
32.5°	25145.7	25010.0	25298.3	25454.8	25325.5	25101.8	24267.7	23700.0	23710.4	23498.3	21746.2
35°	25899.6	25908.7	26306.9	26727.2	26725.9	26410.4	25701.8	25438.0	25558.2	25463.8	23564.3
37.5°	26667.7	26599.2	27059.5	27684.1	27888.4	27607.8	27187.5	27344.0	27505.7	27795.3	25281.5
40°	27031.1	27033.7	27591.0	28312.6	28784.5	28731.5	28584.1	29630.2	29965.1	30051.8	24593.6
42.5°	26592.7	26623.8	27618.2	28894.4	29627.6	29908.2	30231.5	32013.4	32239.7	31749.6	25404.4
45°	26018.6	26061.3	27228.9	29094.9	30375.1	31165.1	32056.1	33794.0	33969.9	33318.2	26583.7
47.5°	25479.4	25558.2	26773.8	28974.6	30967.3	32581.1	33688.0	35471.2	35685.8	34825.9	27682.8
50°	24770.7	24946.6	26186.7	28655.2	31413.4	33813.4	35195.8	37489.7	37572.5	36297.5	28673.3
52.5°	24085.4	24137.1	25522.0	28246.6	31749.6	34930.7	36994.5	39563.9	39659.6	37908.7	29587.6
55°	23146.6	23224.2	24772.0	27734.5	31956.5	35866.9	38815.2	41725.9	41811.3	39844.5	30570.3
57.5°	22113.4	22170.3	23799.6	26948.3	31801.3	36698.3	40756.1	44449.2	44658.7	41835.8	31453.5
60°	20816.4	20891.4	22545.3	25858.2	31266.0	37668.2	43153.5	47360.0	47360.0	43664.3	32153.1
62.5°	18989.3	19094.0	20768.6	24288.4	30153.9	38229.4	45067.3	49894.5	49877.7	45104.8	32389.7
65°	16866.0	16882.8	18400.9	22079.8	28307.4	37930.7	45796.6	51375.1	51337.6	46147.1	32063.8
67.5°	14806.1	14788.0	16135.4	19059.1	25644.9	36460.4	45448.8	51915.6	51960.9	46397.9	30849.6
70°	11883.6	11860.4	13099.2	15488.8	21618.1	33293.6	43471.6	50543.6	50680.7	44965.2	28833.7
72.5°	8503.5	8468.5	9062.1	10642.3	15875.5	27388.0	38542.3	45270.3	45521.2	40375.9	25152.2
75°	4979.8	5017.3	5636.6	6545.7	9428.0	18016.8	31260.8	38018.6	38376.8	34347.5	19783.2
77.5°	2769.8	2762.1	3217.2	3901.3	4637.1	9023.3	21823.7	29940.6	30062.1	26914.7	13303.5
80°	1337.1	1330.6	1453.5	1833.6	2644.4	4053.9	10718.6	18602.6	18971.2	16357.8	6504.3
82.5°	962.1	967.2	1035.8	1006.0	986.6	1788.4	3576.7	5859.1	5349.6	4128.9	2010.8
85°	722.8	722.8	784.9	724.1	707.3	910.3	1739.2	2093.5	2009.5	1837.5	1194.8
87.5°	340.1	323.3	344.0	325.9	302.6	403.4	762.9	884.5	818.5	713.8	522.4
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°	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3	14379.3
2.5°	14447.9	14476.3	14625.0	14819.0	14837.1	15003.9	15055.6	15262.5	15254.8	15197.9	15257.4
5°	14544.9	14631.5	14886.2	15159.1	15228.9	15438.4	15483.6	15686.7	15699.6	15629.8	15688.0
7.5°	14700.0	14826.8	15067.3	15337.5	15368.6	15554.8	15547.0	15739.7	15706.1	15645.3	15722.9
10°	14890.1	14988.4	15148.7	15327.2	15313.0	15461.7	15415.1	15553.5	15483.6	15434.5	15523.7
12.5°	15081.5	15085.4	15098.3	15210.8	15122.9	15156.5	15064.7	15166.8	15059.5	14976.8	15031.1
15°	15272.9	15164.3	14981.9	14912.1	14667.7	14542.3	14410.4	14533.2	14282.4	14150.5	14184.1
17.5°	15543.1	15281.9	14669.0	13781.9	13029.3	12614.2	12302.6	12062.1	12067.3	12186.2	12257.3
20°	15759.1	14766.0	13268.6	12720.3	12157.8	11398.7	10220.7	9897.4	9684.1	9680.2	9715.1
22.5°	15682.8	14220.3	13269.9	12412.5	11189.2	9672.4	9162.9	8866.8	8369.0	7304.8	7218.1
25°	16384.9	14703.9	13346.1	11776.3	9646.6	8877.2	8177.6	7602.2	6345.3	6147.4	6139.7
27.5°	17226.8	15356.9	13449.6	10403.0	9029.8	7991.4	7101.7	5711.6	5109.1	5023.7	4994.0
30°	18200.5	16126.3	12818.6	9963.4	8372.9	6960.8	5781.5	4386.2	3896.1	3866.4	3874.1
32.5°	19421.2	17004.3	12160.4	9601.3	7577.6	5767.3	3942.7	3345.3	3064.7	2758.2	2856.5
35°	20722.0	16498.7	12553.5	9153.9	6581.9	4337.1	2994.8	2657.3	2429.7	2032.8	1871.1
37.5°	20209.9	16846.6	13009.9	8662.5	5337.9	2940.5	2317.2	2025.0	1811.6	1480.6	1474.1
40°	20841.0	17842.3	13335.8	7871.1	3859.9	2085.8	1688.8	1567.2	1469.0	1285.3	1259.5
42.5°	21955.6	18711.2	13556.9	6856.0	2306.9	1551.7	1441.8	1459.9	1374.6	1233.6	1216.8
45°	23053.5	19471.6	13348.7	5308.2	1641.0	1399.1	1405.6	1397.8	1294.4	1242.7	1224.6
47.5°	24053.1	20114.3	12763.0	3501.7	1423.7	1364.2	1378.5	1343.5	1227.2	1197.4	1194.8
50°	24911.7	20793.1	10105.6	2683.2	1369.4	1317.7	1348.7	1291.8	1091.4	1059.1	1025.4
52.5°	25440.6	19664.3	8978.0	2061.2	1312.5	1245.3	1254.3	1300.9	1028.0	818.5	766.8
55°	25360.4	17714.3	8347.0	1716.0	1222.0	1144.4	1162.5	1237.5	929.7	640.1	579.3
57.5°	25741.9	17553.9	7692.7	1459.9	1053.9	1037.1	1000.9	1127.6	845.7	424.1	402.2
60°	25679.8	17534.5	6865.1	1148.3	931.0	871.6	826.3	918.1	606.5	157.8	143.5
62.5°	25578.9	17036.7	5925.0	1029.3	857.3	834.1	795.3	898.7	515.9	109.9	81.5
65°	25073.3	16228.5	4859.5	901.3	800.4	752.6	750.0	850.9	425.4	60.8	27.2
67.5°	23347.0	14468.6	3615.5	830.2	766.8	742.2	787.5	819.8	408.6	62.1	24.6
70°	21200.5	12147.4	2332.8	748.7	719.0	731.9	769.4	828.9	397.0	56.9	22.0
72.5°	17727.2	9397.0	1414.7	668.5	650.4	689.2	759.1	828.9	367.2	47.8	18.1
75°	13485.8	6267.7	1052.6	590.9	570.3	619.4	691.8	796.6	360.8	41.4	11.6
77.5°	8372.9	2959.9	830.2	496.6	474.6	525.0	580.6	656.9	365.9	40.1	6.5
80°	3386.6	1236.2	651.7	399.6	372.4	399.6	470.7	559.9	290.9	56.9	0.0
82.5°	1425.0	870.3	532.8	318.1	297.4	262.5	320.7	415.1	228.9	45.3	0.0
85°	942.7	603.9	381.5	215.9	190.1	128.0	156.5	187.5	130.6	0.0	0.0
87.5°	426.7	267.7	166.8	73.7	62.1	34.9	20.7	18.1	0.0	0.0	0.0
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)