

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: P232785

Luminaire Tested: **CTN-10-3-D-E1-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232785
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-10-3-D-E1-T2-7030
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 3000K LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30719 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 212
Input Voltage (V): NR
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: 25 FT

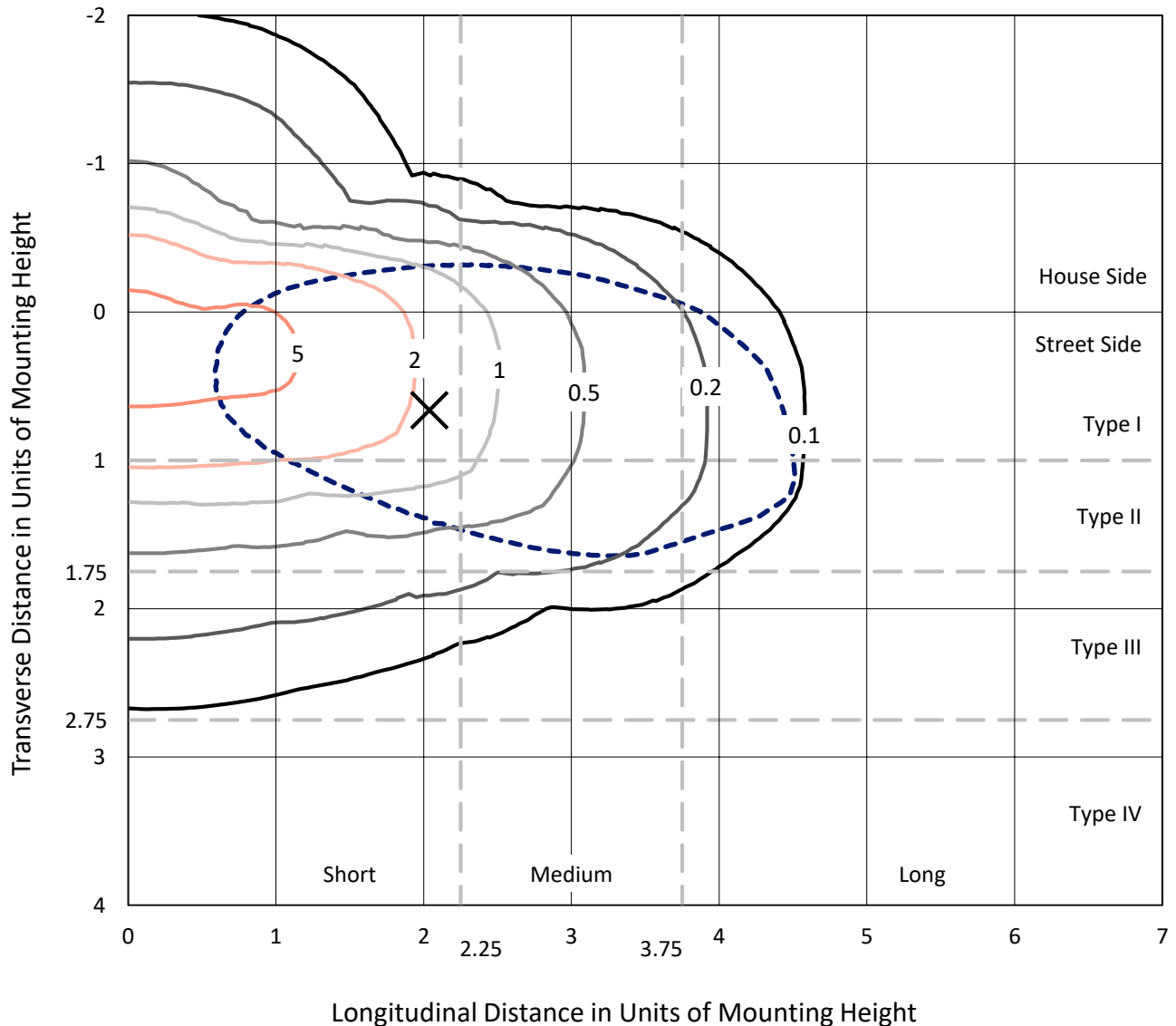


REPORT NUMBER: P232785

CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

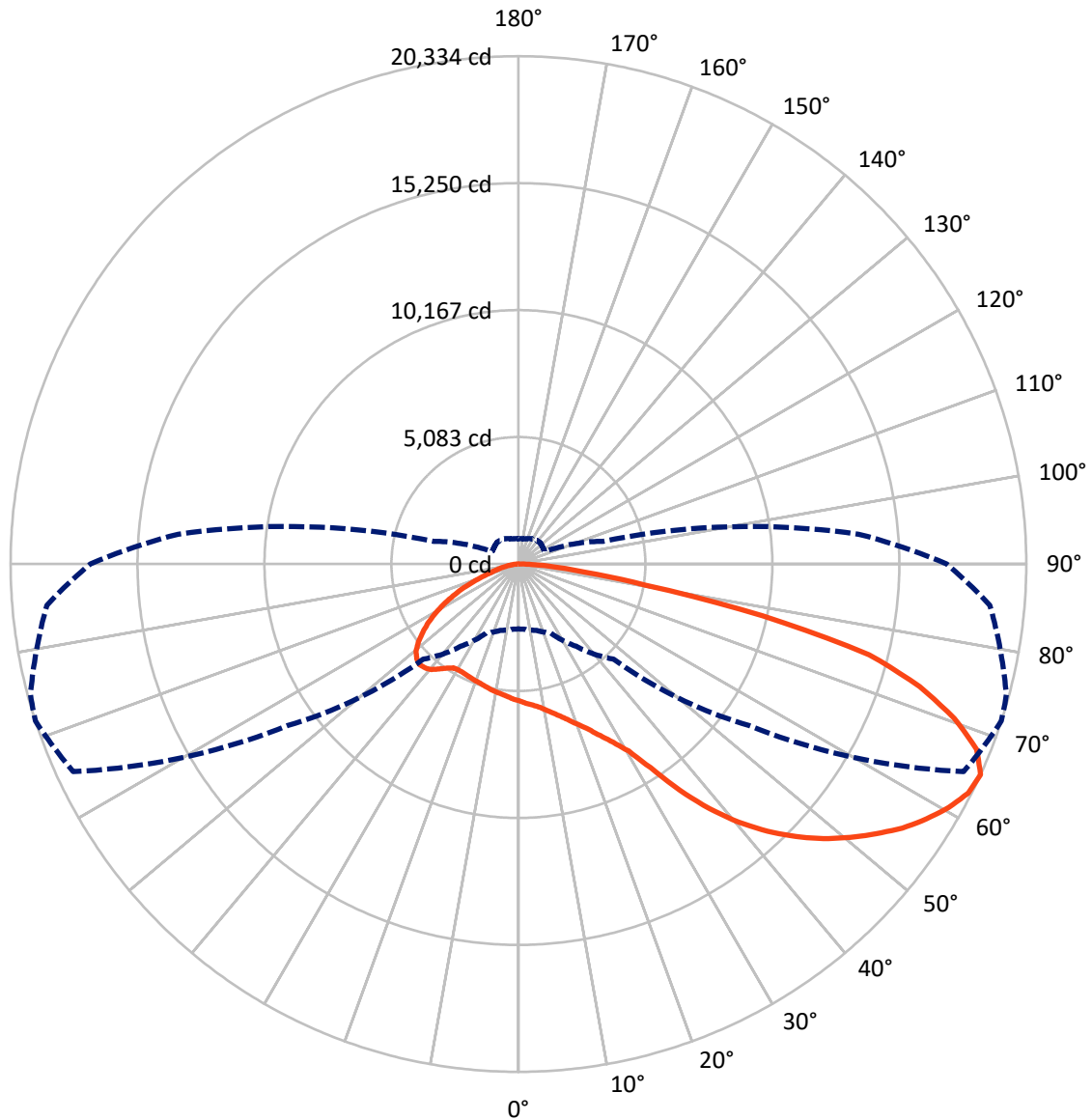


Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P232785

CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P232785

CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

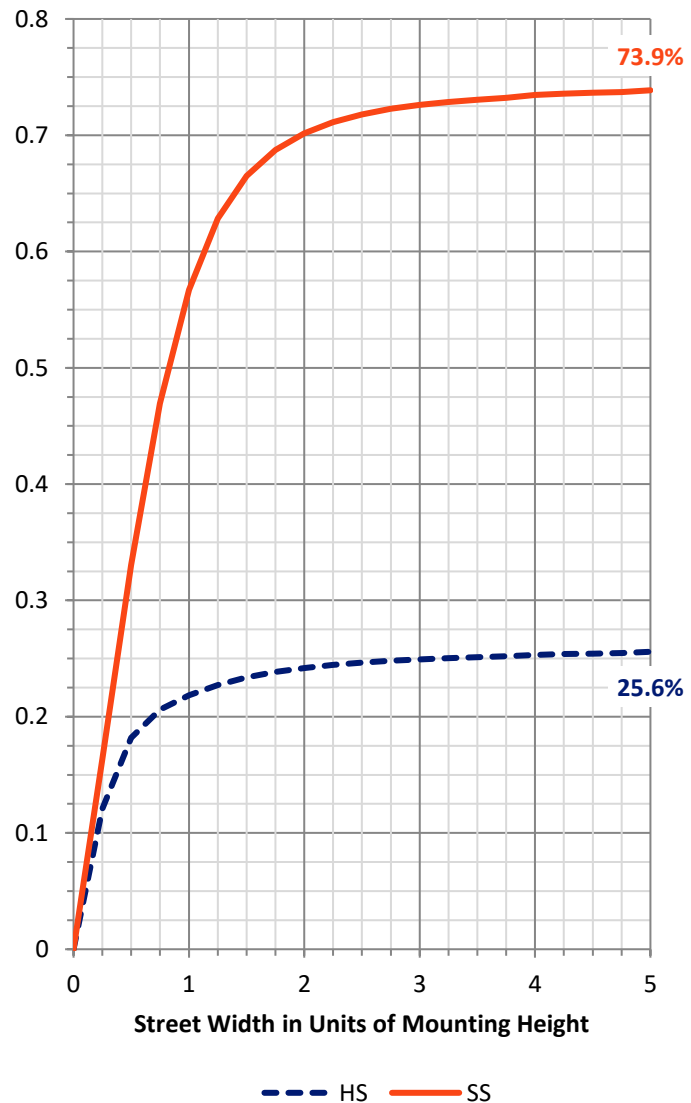
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8002.0	0.0	8002.0
	% Fixture	26.0	0.0	26.0
Street Side	Lumens	22717.0	0.0	22717.0
	% Fixture	74.0	0.0	74.0
Total	Lumens	30719.0	0.0	30719.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	527.2	1.7
10°-20°	1607.0	5.2
20°-30°	2691.8	8.8
30°-40°	3907.1	12.7
40°-50°	5283.2	17.2
50°-60°	6166.9	20.1
60°-70°	6140.3	20.0
70°-80°	3723.4	12.1
80°-90°	672.1	2.2
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°	30719.0	100.0
0°-180°	30719.0	100.0



REPORT NUMBER: P232785

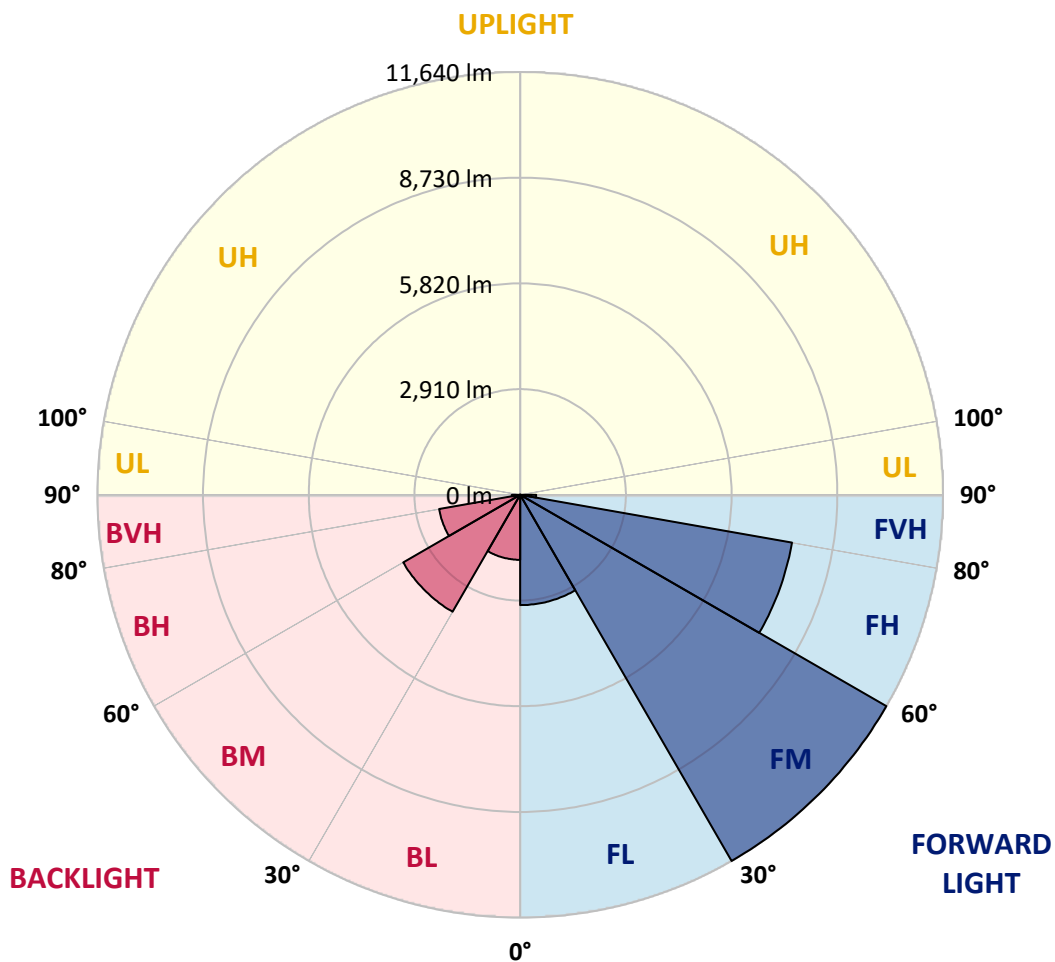
CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3036.1	9.9			
FM (30°-60°)	11640.1	37.9			
FH (60°-80°)	7598.6	24.7			G4/12000
FVH (80°-90°)	442.1	1.4			G3/500
BL (0°-30°)	1789.9	5.8	B3/2500		
BM (30°-60°)	3717.1	12.1	B3/5000		
BH (60°-80°)	2265.0	7.4	B3/2500		G3/2500
BVH (80°-90°)	230.0	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short





REPORT NUMBER: P232785

CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1
2.5°	5768.4	5757.4	5761.1	5766.4	5700.9	5689.9	5635.7	5608.1	5577.9	5556.6	5508.7
5°	6065.3	6064.3	6040.7	6041.0	5938.3	5898.7	5798.6	5724.8	5660.7	5627.4	5527.7
7.5°	6334.6	6306.7	6304.3	6297.7	6181.6	6118.5	5985.8	5873.8	5775.7	5724.5	5569.9
10°	6587.6	6568.0	6568.3	6560.3	6441.3	6362.5	6202.9	6062.0	5931.0	5864.8	5639.7
12.5°	6857.6	6835.3	6831.6	6803.7	6694.3	6618.5	6444.0	6270.7	6112.2	6037.4	5745.4
15°	7134.5	7113.2	7102.6	7070.3	6948.3	6867.5	6721.2	6507.1	6326.6	6233.5	5884.4
17.5°	7389.8	7376.9	7358.9	7334.0	7227.3	7138.8	6992.5	6789.1	6573.3	6454.3	6044.3
20°	7547.4	7536.1	7548.1	7548.1	7486.6	7422.4	7275.1	7100.6	6867.5	6720.2	6228.2
22.5°	7668.1	7656.5	7709.7	7736.6	7742.9	7728.6	7584.0	7431.7	7189.0	7037.1	6455.6
25°	7697.7	7699.0	7789.1	7910.2	7999.9	8041.8	7930.4	7818.4	7608.9	7418.8	6766.5
27.5°	7689.1	7697.7	7813.1	8029.2	8244.3	8346.0	8305.8	8240.6	8074.7	7912.8	7181.7
30°	7676.4	7699.0	7851.3	8117.0	8428.2	8629.6	8669.9	8768.6	8687.1	8576.8	7840.3
32.5°	7519.5	7539.8	7757.9	8149.5	8584.7	8950.5	9166.9	9585.5	9718.1	9696.5	8859.7
35°	7152.1	7192.0	7515.5	8064.1	8705.4	9277.3	9791.0	10667.4	11126.5	11089.6	10035.7
37.5°	6777.8	6826.6	7214.6	7904.8	8760.0	9625.1	10473.9	11876.9	12431.8	12377.9	11165.7
40°	6438.3	6494.5	6886.2	7666.1	8745.3	9950.2	11191.3	13013.6	13594.1	13498.3	12173.4
42.5°	6046.0	6127.5	6484.2	7348.0	8631.3	10179.3	11901.2	14099.8	14625.4	14479.1	13090.4
45°	5680.6	5746.1	6088.9	6912.1	8457.4	10347.8	12550.5	15106.2	15563.3	15392.8	13935.2
47.5°	5284.6	5367.8	5712.2	6463.6	8112.0	10385.7	13144.9	16000.2	16430.4	16252.9	14723.2
50°	4240.0	4374.0	5152.0	6024.7	7575.7	10248.1	13672.9	16838.7	17209.7	17069.4	15538.4
52.5°	3696.8	3723.0	4116.7	5521.0	6922.7	9888.0	14053.9	17661.2	17942.5	17799.5	16259.9
55°	3453.7	3461.0	3637.2	4672.9	6289.4	9202.1	14238.4	18448.8	18660.3	18462.1	16942.8
57.5°	3204.0	3244.9	3422.1	3943.4	5693.9	8212.4	14110.4	19137.7	19263.7	19040.6	17569.8
60°	2997.6	3030.8	3207.7	3561.8	5040.6	7061.7	13514.0	19686.6	19797.7	19569.9	18158.3
62.5°	2810.4	2834.7	2971.6	3303.4	4450.5	6041.3	12400.9	19833.6	20206.3	20025.1	18702.2
65°	2597.9	2620.2	2747.2	3043.1	4018.6	5388.4	11281.1	19668.4	20333.6	20223.9	18946.9
67.5°	2345.6	2375.5	2490.2	2745.2	3573.7	4826.2	9959.2	19249.1	19790.4	19621.8	18419.3
70°	2014.1	2063.0	2193.0	2414.1	3054.1	4101.7	7944.7	17871.0	18514.0	18321.5	17010.2
72.5°	1587.9	1598.5	1692.6	1876.5	2418.7	3262.9	5361.8	15121.8	16801.1	16746.6	15047.0
75°	1183.9	1220.2	1371.1	1512.7	1767.1	2340.9	3259.2	11021.4	14505.4	14505.4	12681.1
77.5°	966.2	985.1	1085.5	1204.5	1378.1	1642.7	2072.0	6227.5	9998.1	11012.1	9531.6
80°	755.0	748.4	755.4	808.9	972.8	1086.2	1377.4	3200.7	5165.3	5871.4	6243.8
82.5°	413.6	413.9	459.1	432.9	536.6	610.4	835.5	1800.3	2699.0	2996.9	3345.0
85°	209.5	204.5	227.7	212.4	248.4	278.6	379.4	894.3	1377.4	1493.1	1576.2
87.5°	74.8	71.1	81.8	98.1	91.8	97.4	131.0	321.5	532.3	569.5	558.2
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: P232785

CATALOG NUMBER: CTN-10-3-D-E1-T2-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1	5483.1
2.5°	5495.1	5463.2	5424.6	5392.4	5324.2	5288.6	5260.4	5268.3	5237.8	5193.5	5192.9
5°	5491.4	5430.6	5347.8	5279.3	5169.6	5113.1	5059.9	5045.9	5000.4	4956.5	4954.2
7.5°	5504.1	5423.3	5289.0	5179.6	5036.6	4948.5	4866.1	4833.8	4780.3	4734.1	4731.7
10°	5539.0	5432.3	5248.4	5096.8	4917.9	4797.2	4690.5	4625.7	4563.8	4516.3	4515.6
12.5°	5601.5	5458.9	5212.8	5015.0	4802.6	4642.6	4506.3	4422.5	4336.1	4300.9	4298.9
15°	5689.6	5497.7	5166.6	4906.3	4660.6	4478.4	4309.8	4199.1	4103.4	4069.5	4076.8
17.5°	5802.6	5561.3	5129.4	4786.3	4504.0	4284.2	4109.0	3997.6	3856.7	3825.4	3834.1
20°	5942.9	5659.3	5121.4	4676.5	4332.4	4070.8	3855.7	3776.9	3598.3	3556.4	3550.8
22.5°	6124.5	5775.0	5118.1	4559.2	4131.3	3825.4	3570.4	3470.3	3320.4	3249.9	3234.0
25°	6349.2	5909.0	5112.4	4441.8	3907.2	3545.8	3235.6	3095.0	3001.2	2894.5	2892.2
27.5°	6645.1	6088.9	5125.7	4325.5	3662.8	3219.7	2876.2	2705.7	2651.8	2582.6	2546.7
30°	7155.1	6409.4	5162.0	4184.8	3395.5	2844.3	2482.6	2353.2	2287.1	2216.9	2205.0
32.5°	8011.2	7102.9	5274.0	4032.5	3098.0	2438.3	2160.4	2025.1	1915.4	1879.1	1869.5
35°	9083.5	7926.5	5561.9	3869.6	2776.1	2116.8	1895.1	1716.6	1611.8	1603.2	1602.5
37.5°	10046.6	8804.8	5937.3	3668.8	2421.4	1887.4	1631.8	1477.8	1399.0	1407.0	1428.0
40°	10978.2	9584.2	6335.2	3468.7	2076.9	1644.7	1376.1	1302.3	1267.0	1295.6	1309.6
42.5°	11853.3	10296.0	6621.8	3197.0	1778.7	1384.1	1199.9	1243.4	1256.1	1279.7	1289.3
45°	12671.2	11025.4	6835.0	2869.9	1510.4	1200.2	1174.6	1249.8	1285.7	1304.0	1303.0
47.5°	13462.4	11722.6	6898.8	2437.3	1303.0	1179.9	1197.9	1240.8	1297.0	1330.6	1328.2
50°	14252.1	12357.0	6845.3	1997.8	1261.1	1219.2	1220.2	1213.2	1278.7	1305.9	1295.6
52.5°	14959.9	12949.4	6542.7	1672.0	1289.0	1260.4	1246.4	1211.2	1229.8	1248.8	1239.5
55°	15596.2	13443.8	6068.3	1511.4	1312.9	1287.0	1305.6	1237.1	1200.2	1184.3	1187.3
57.5°	16188.4	13825.2	5523.0	1411.7	1307.9	1280.7	1329.2	1230.1	1176.3	1109.1	1096.2
60°	16749.9	14075.5	4908.9	1325.6	1284.3	1271.4	1278.0	1230.5	1154.0	1066.9	1045.6
62.5°	17146.9	14088.8	4204.1	1248.8	1238.8	1257.1	1237.8	1220.8	1160.0	1093.8	1080.5
65°	17138.9	13674.9	3506.9	1160.7	1181.9	1218.8	1185.6	1129.4	1037.3	1017.7	1011.0
67.5°	16395.2	12627.3	2830.7	1030.0	1089.8	1167.3	1110.8	1019.4	939.9	916.6	920.9
70°	14778.0	11146.1	2090.6	834.8	951.5	1079.5	1044.3	942.6	855.4	837.2	856.8
72.5°	12861.3	9574.8	1486.1	662.0	790.3	955.2	941.2	853.5	777.0	784.6	802.3
75°	10737.5	7621.9	1090.2	569.5	620.4	814.2	849.5	793.3	744.7	769.0	768.3
77.5°	8002.6	5628.7	830.2	477.8	513.7	633.7	748.7	727.4	859.8	1045.0	1050.9
80°	5258.7	3654.5	560.2	392.3	420.2	475.4	611.1	700.9	880.4	763.0	753.7
82.5°	2913.8	1939.6	347.4	305.2	315.5	344.8	442.9	731.8	646.7	600.1	602.4
85°	1292.0	751.1	205.1	204.8	205.5	209.1	284.3	554.9	454.8	440.5	447.8
87.5°	447.5	197.8	64.5	51.2	57.9	72.5	147.9	338.5	237.4	196.8	197.5
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)