

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: P591419

Luminaire Tested: **CTN-CA10-760-740-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-740-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61978 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

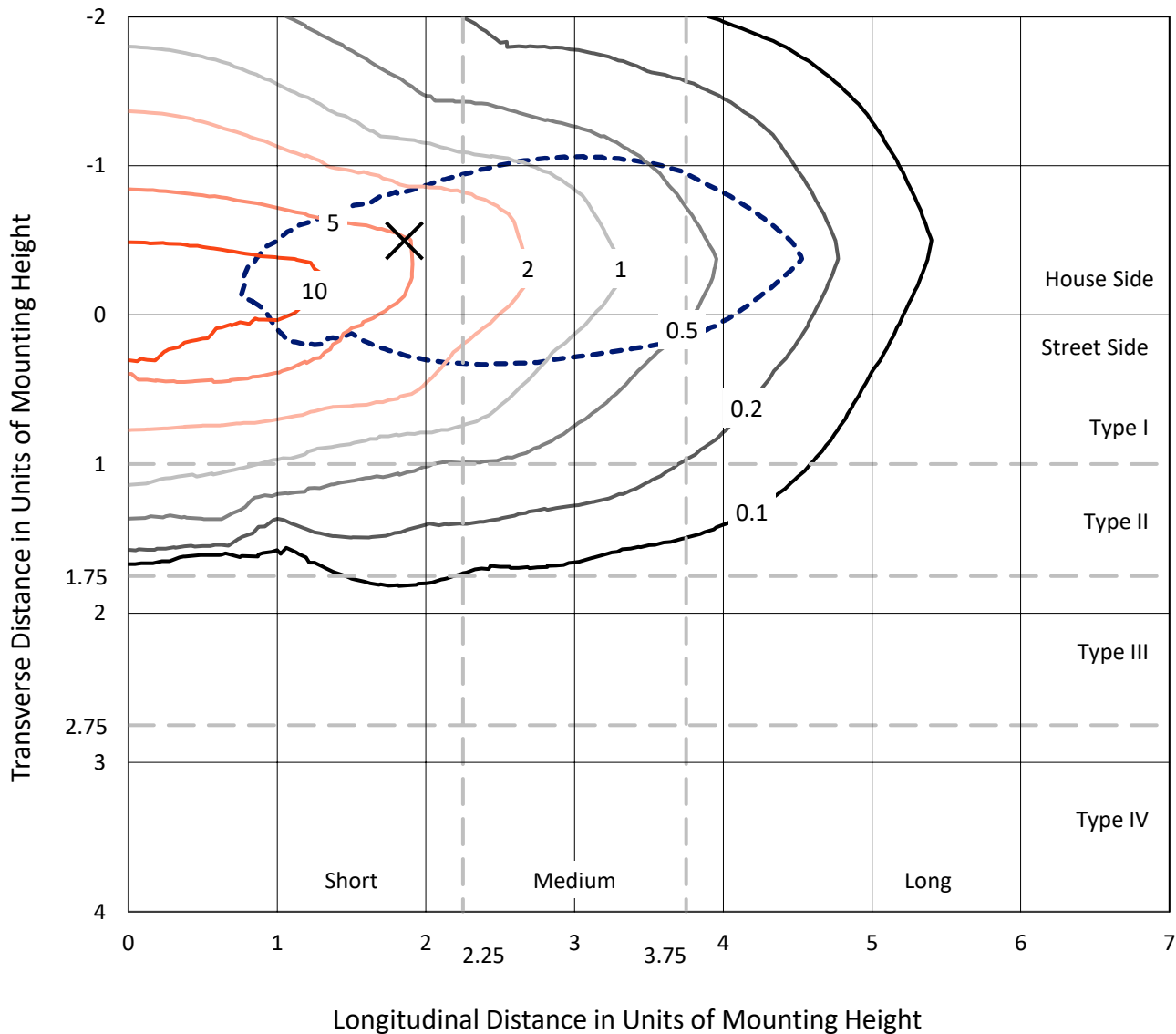
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

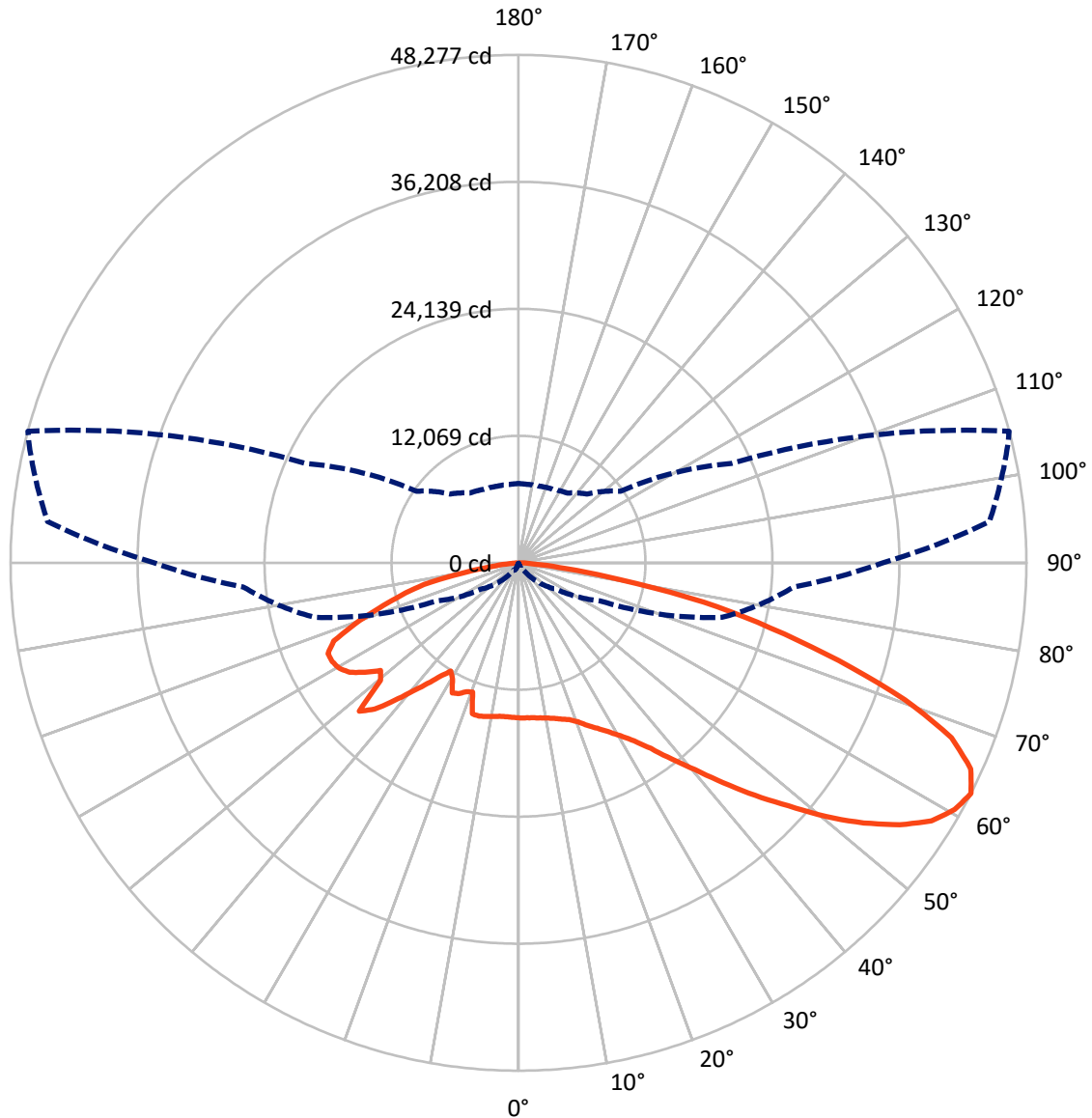
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.4 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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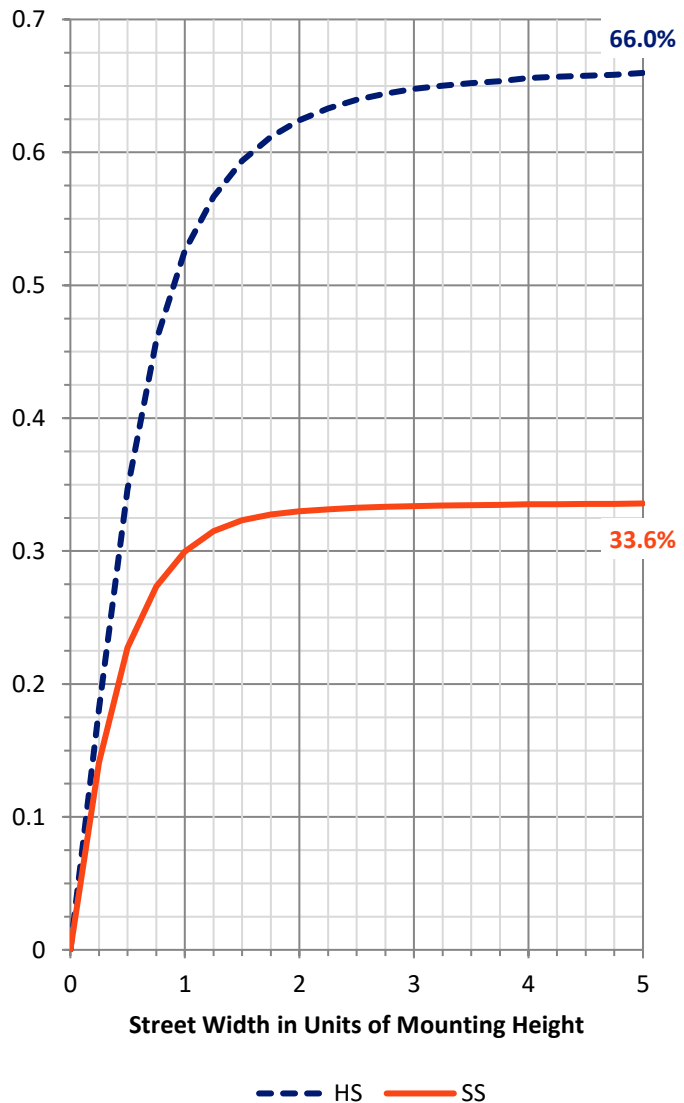
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	41239.5	0.0	41239.5
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	20738.5	0.0	20738.5
	% Fixture	33.5	0.0	33.5
Total	Lumens	61978.0	0.0	61978.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1406.8	2.3
10°-20°	3973.4	6.4
20°-30°	5599.9	9.0
30°-40°	7608.3	12.3
40°-50°	10350.2	16.7
50°-60°	12261.8	19.8
60°-70°	12024.0	19.4
70°-80°	7583.7	12.2
80°-90°	1169.9	1.9
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°	61978.0	100.0
0°-180°	61978.0	100.0

Coefficient of Utilization

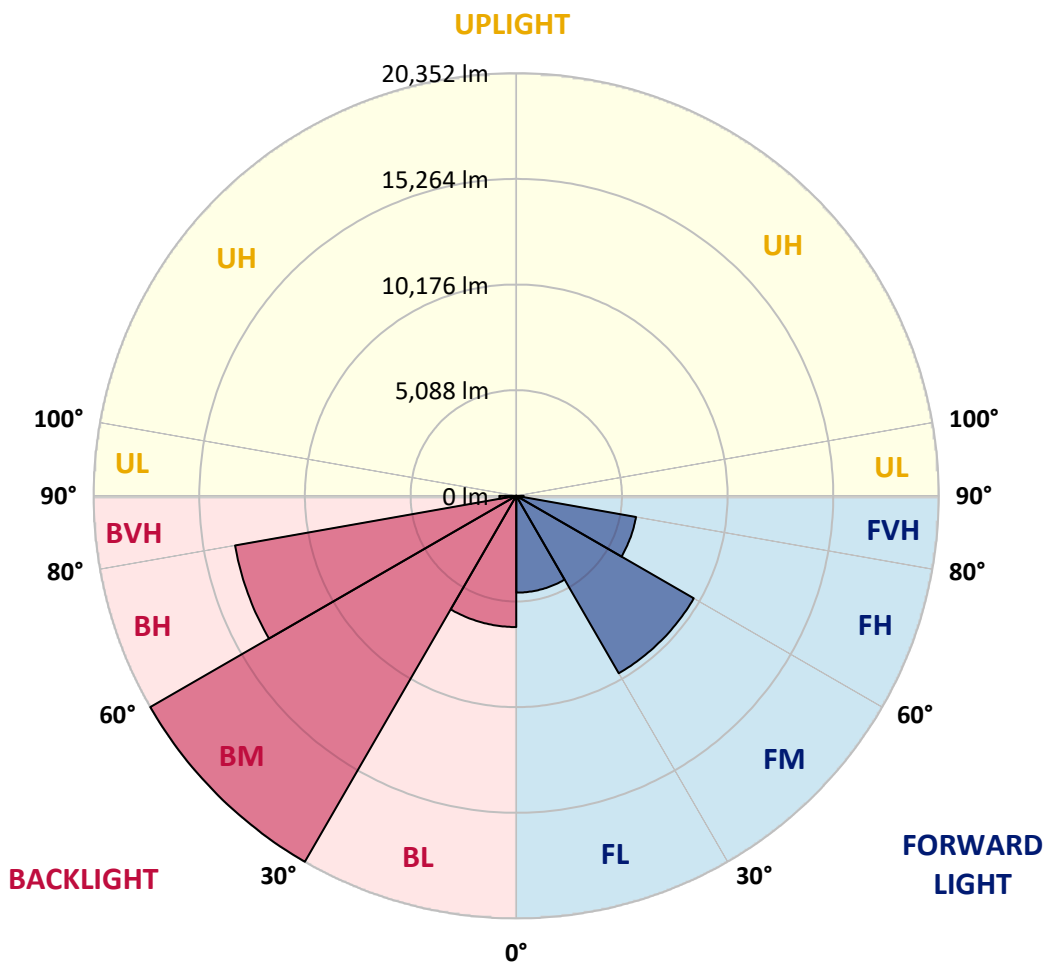


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4661.7	7.5			
FM (30°-60°)	9868.4	15.9			
FH (60°-80°)	5855.5	9.4			G3/7500
FVH (80°-90°)	352.9	0.6			G3/500
BL (0°-30°)	6318.4	10.2	B5		
BM (30°-60°)	20351.9	32.8	B5		
BH (60°-80°)	13752.3	22.2	B5		G5
BVH (80°-90°)	817.0	1.3			G5
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6
2.5°	14753.5	14638.2	14720.5	14845.6	14658.0	14766.6	14585.5	14733.7	14697.5	14707.4	14776.5
5°	14638.2	14516.4	14615.2	14779.8	14595.4	14717.2	14569.1	14694.2	14681.0	14727.1	14783.1
7.5°	14529.6	14414.3	14516.4	14625.0	14529.6	14648.1	14536.1	14690.9	14700.8	14802.8	14848.9
10°	14414.3	14299.1	14397.9	14523.0	14444.0	14592.1	14546.0	14733.7	14806.1	14941.1	14980.6
12.5°	14160.8	14058.7	14141.1	14285.9	14299.1	14516.4	14546.0	14835.8	14924.7	15102.4	15161.7
15°	12636.4	12748.4	13186.2	13607.7	13788.8	14190.4	14411.0	14927.9	15053.1	15306.6	15398.8
17.5°	10223.0	10012.3	9330.8	9508.6	10509.5	11859.4	12369.7	13653.8	15010.3	15563.4	15681.9
20°	6041.6	6472.9	7806.4	8214.7	8583.4	10035.4	11750.7	12514.6	13034.8	15000.4	16070.4
22.5°	4981.5	5011.1	5965.9	7849.2	8264.0	8833.6	10160.5	12675.9	13212.6	13604.4	14796.3
25°	4619.3	4648.9	4813.6	6268.8	8036.9	8695.3	9278.1	11586.1	13670.2	14154.2	15086.0
27.5°	4329.6	4369.1	4520.5	4928.8	7493.6	8655.8	9393.3	10275.7	13874.4	14806.1	15678.6
30°	4112.3	4128.7	4283.5	4678.6	5666.3	8665.7	9561.3	10502.9	12708.8	15632.5	16508.3
32.5°	3914.7	3924.6	4085.9	4471.1	5067.1	8027.0	9814.8	10977.0	12136.0	16310.8	17647.5
35°	3763.3	3756.7	3901.5	4280.2	4872.8	6147.0	10097.9	11546.6	13051.3	15668.8	19346.4
37.5°	3618.4	3608.5	3733.6	4082.6	4701.6	5755.2	9768.7	12231.4	14364.9	16156.0	19208.1
40°	3506.5	3486.7	3592.1	3904.8	4523.8	5656.4	7694.4	12955.8	15807.0	18668.2	20370.4
42.5°	3407.7	3394.5	3483.4	3733.6	4342.7	5537.9	7170.9	13347.6	17601.4	21572.1	23376.4
45°	3259.5	3279.3	3378.0	3618.4	4148.5	5370.0	7223.6	10720.2	19501.2	24090.8	26372.5
47.5°	3197.0	3193.7	3256.2	3483.4	3980.6	5136.2	7187.4	9831.2	20696.3	26728.1	29306.1
50°	3098.2	3081.7	2686.6	3325.4	3809.4	4846.5	7036.0	10088.1	17222.8	29315.9	31999.3
52.5°	2913.8	2591.2	2350.8	3213.4	3634.9	4530.4	6696.8	10200.0	16630.1	28855.0	34313.9
55°	1547.4	1725.2	2225.7	3055.4	3430.7	4247.3	6199.7	10121.0	17910.9	23073.5	31854.4
57.5°	1372.9	1366.4	1415.8	2413.4	1787.8	3937.8	5600.5	9758.8	19122.5	24127.0	32450.3
60°	108.7	111.9	131.7	803.4	948.2	2772.2	4955.1	9311.0	19764.6	25371.6	33895.7
62.5°	52.7	59.3	79.0	717.8	865.9	2522.0	4372.4	8547.2	20034.5	26270.4	34610.2
65°	13.2	16.5	36.2	632.1	754.0	2245.4	3786.3	7651.6	20057.6	26306.6	35186.4
67.5°	9.9	16.5	36.2	572.9	688.1	2001.8	3272.7	7026.1	19076.4	26171.7	34896.6
70°	9.9	16.5	36.2	513.6	622.3	1735.1	2818.3	6413.7	16570.9	25667.9	33912.2
72.5°	9.9	19.8	36.2	451.1	546.5	1471.7	2393.6	5738.7	13907.3	23564.0	31719.4
75°	9.9	19.8	39.5	365.5	467.5	1172.1	1965.6	4915.6	11566.4	20432.9	28084.6
77.5°	9.9	19.8	39.5	283.2	378.6	875.8	1488.2	3895.0	9228.7	15069.5	19731.6
80°	9.9	19.8	39.5	200.8	309.5	615.7	1083.2	2657.0	5505.0	7921.6	10048.5
82.5°	9.9	19.8	39.5	144.9	223.9	444.5	668.4	1310.4	2627.4	3802.8	4770.8
85°	6.6	16.5	36.2	95.5	118.5	270.0	398.4	582.8	786.9	1040.4	1405.9
87.5°	6.6	9.9	23.0	36.2	49.4	95.5	148.2	131.7	148.2	309.5	444.5
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6	14743.6
2.5°	14766.6	14753.5	14756.7	14829.2	14766.6	14779.8	14671.1	14888.4	14868.7	14839.1	14924.7
5°	14783.1	14776.5	14802.8	14865.4	14769.9	14786.4	14684.3	14937.8	14875.3	14865.4	14967.5
7.5°	14865.4	14855.5	14881.9	14911.5	14806.1	14806.1	14717.2	14918.1	14881.9	14816.0	14931.2
10°	15013.6	14977.3	15003.7	15020.1	14858.8	14852.2	14687.6	14924.7	14832.5	14799.5	14947.7
12.5°	15221.0	15138.7	15178.2	15151.8	14937.8	14898.3	14677.7	14832.5	14717.2	14697.5	14832.5
15°	15500.8	15392.2	15421.8	15372.4	15102.4	14987.2	14631.6	14697.5	14513.1	14496.6	14595.4
17.5°	15760.9	15695.1	15678.6	15678.6	15362.6	15076.1	14588.8	14496.6	14253.0	14236.5	14285.9
20°	16231.8	16142.9	16133.0	16054.0	15586.4	15148.5	14519.7	14236.5	13874.4	13792.1	13884.2
22.5°	16383.2	16814.5	16784.9	16435.9	15774.1	15207.8	14378.1	13910.6	13413.4	13255.4	13301.5
25°	16834.3	17482.9	17430.2	16923.2	15965.1	15240.7	14206.9	13551.7	12866.9	12590.3	12600.2
27.5°	17548.7	18210.5	18174.3	17443.4	16202.1	15250.6	14015.9	13173.1	12323.6	11961.5	11991.1
30°	18457.5	19125.8	19073.1	18022.8	16561.0	15270.4	13871.1	12718.7	11826.5	11434.7	11428.1
32.5°	19721.8	20327.6	20172.8	18796.6	16992.3	15352.7	13680.1	12287.4	11372.1	10960.6	10927.6
35°	21631.4	21855.3	21664.3	19718.5	17450.0	15405.4	13373.9	11866.0	10950.7	10545.7	10516.1
37.5°	24212.6	23936.1	23679.3	20755.6	17924.1	15392.2	12985.4	11457.7	10588.5	10203.3	10203.3
40°	24466.2	26326.4	25852.3	21848.7	18352.1	15319.8	12616.7	11059.3	10295.5	9982.7	10032.1
42.5°	25654.7	29253.4	28588.3	22905.5	18661.6	15109.0	12221.6	10697.2	10022.2	9768.7	9788.4
45°	28575.1	31917.0	31528.5	23926.2	18829.5	14737.0	11763.9	10341.6	9716.0	9515.2	9554.7
47.5°	31716.1	35084.3	34514.7	24867.8	18737.3	14187.1	11276.6	10015.6	9396.6	9268.2	9340.7
50°	34685.9	38416.3	37942.1	25529.6	18329.0	13416.7	10756.4	9669.9	9146.4	9044.3	9080.6
52.5°	37599.7	41442.0	41086.4	25888.5	17512.5	12610.1	10275.7	9340.7	8912.7	8784.2	8833.6
55°	40003.2	44309.7	43964.0	25852.3	16284.4	11767.2	9798.3	8985.1	8675.6	8560.4	8599.9
57.5°	41879.9	46542.0	46295.1	25302.4	14855.5	10993.5	9258.4	8636.1	8362.8	8260.7	8293.7
60°	43559.1	47957.8	47638.4	24087.5	13341.0	10140.7	8701.9	8221.2	7994.1	7911.7	7964.4
62.5°	44935.3	47987.4	48277.1	22329.4	11856.1	9238.6	8083.0	7710.9	7546.3	7496.9	7529.8
65°	45287.6	47105.0	47246.6	20156.4	10351.4	8343.1	7338.9	7095.2	7026.1	6996.4	7062.3
67.5°	44800.3	45244.8	44401.9	18319.2	8978.5	7329.0	6535.5	6384.1	6426.9	6433.4	6519.0
70°	43542.6	40266.6	38966.1	16781.6	7697.7	6206.3	5653.1	5603.7	5719.0	5814.5	5877.0
72.5°	40335.8	33059.4	31821.5	14608.6	6068.0	4751.0	4451.4	4609.4	4569.9	4612.7	4724.7
75°	34725.4	25516.5	24749.3	11889.0	4622.6	3453.8	3052.1	3068.6	3117.9	3335.2	3453.8
77.5°	24736.1	18352.1	18009.7	9120.1	3062.0	2031.4	2100.6	2334.3	2403.5	2410.1	2492.4
80°	13107.2	10229.6	9765.4	5373.3	2024.9	1452.0	1580.4	1682.4	1774.6	1870.1	1893.2
82.5°	5906.6	4625.9	4497.5	2670.2	1284.1	1119.4	1149.1	1323.6	1399.3	1415.8	1432.2
85°	2294.8	1596.8	1521.1	1109.6	842.9	757.3	839.6	1017.4	1089.8	1056.9	1047.0
87.5°	612.4	375.3	342.4	372.0	395.1	418.1	477.4	543.3	622.3	599.2	579.5
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)