

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: P833172

Luminaire Tested: **TTN-D1-735-U-MQ-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833172
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D1-735-U-MQ-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3984.7 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U4 - G1

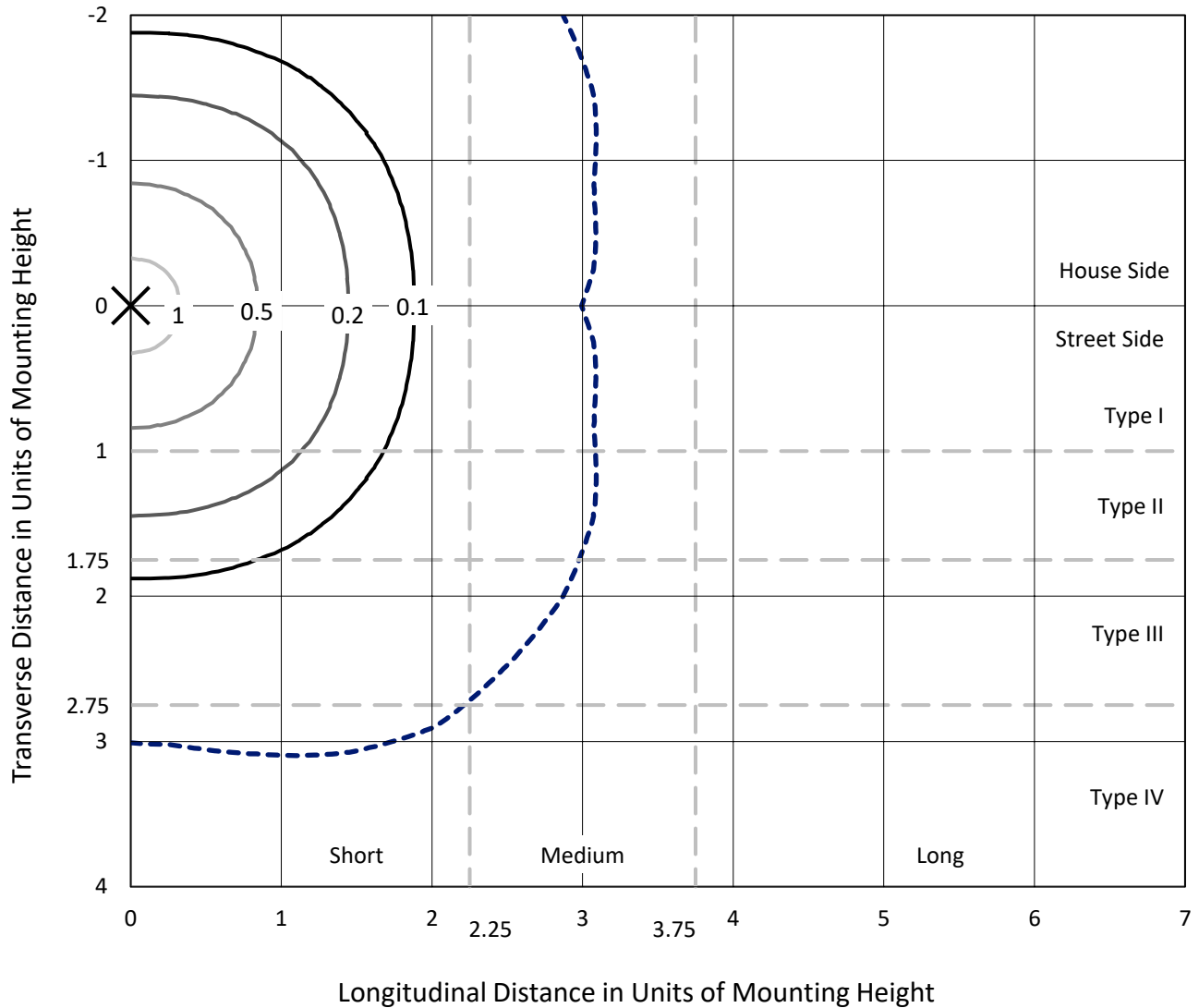
Input Watts (W): 33.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

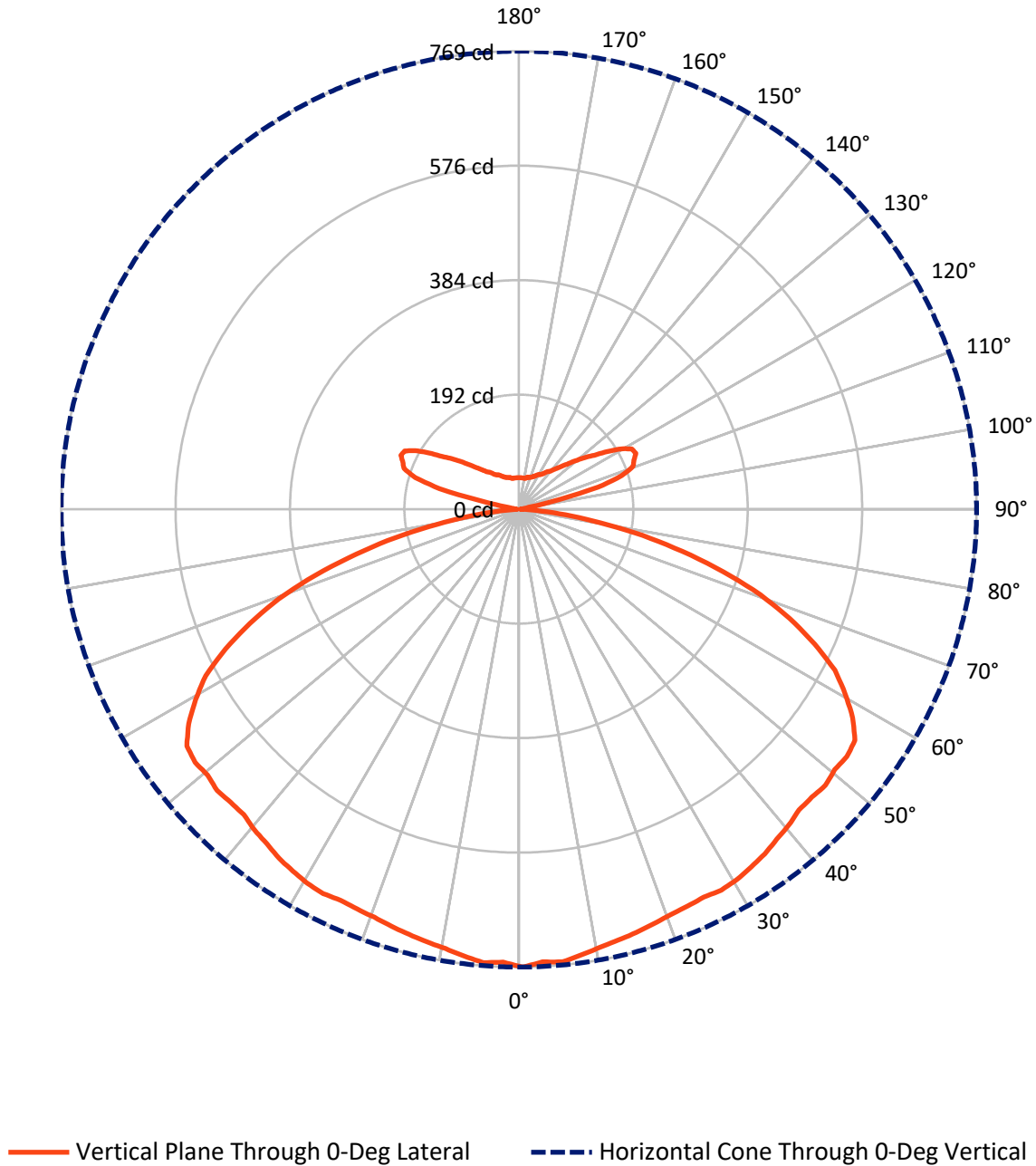
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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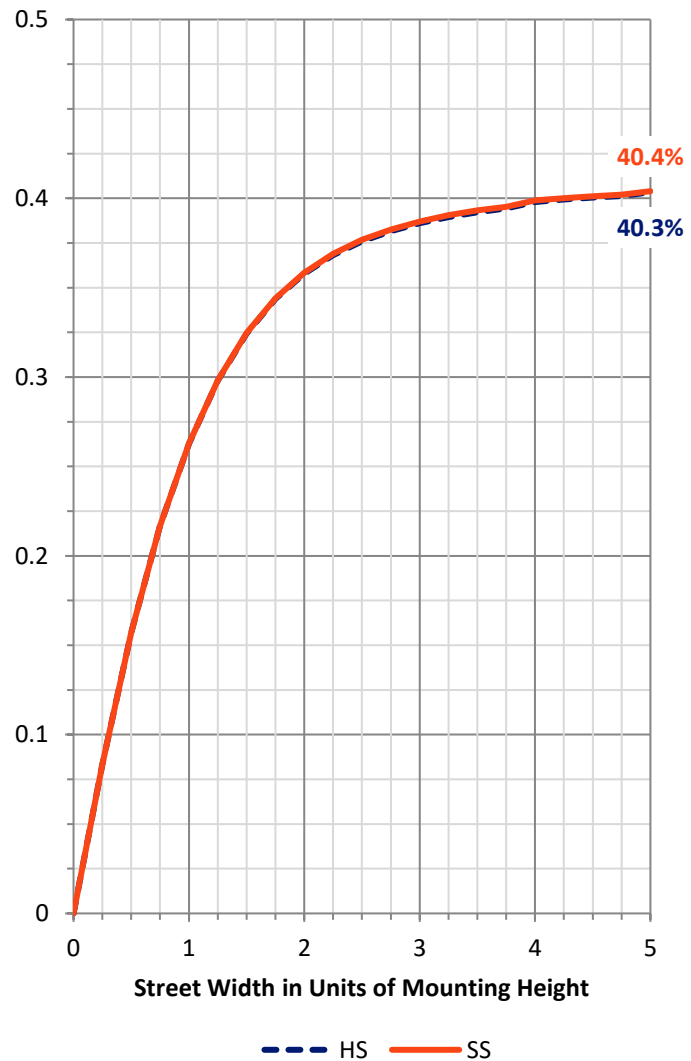
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1616.0	376.3	1992.3
	% Fixture	40.6	9.4	50.0
Street Side	Lumens	1616.0	376.3	1992.3
	% Fixture	40.6	9.4	50.0
Total	Lumens	3232.0	752.7	3984.7
	% Fixture	81.1	18.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.8
10°-20°	208.8	5.2
20°-30°	335.9	8.4
30°-40°	448.8	11.3
40°-50°	545.2	13.7
50°-60°	633.5	15.9
60°-70°	584.5	14.7
70°-80°	342.1	8.6
80°-90°	61.0	1.5
90°-100°	16.8	0.4
100°-110°	170.7	4.3
110°-120°	249.6	6.3
120°-130°	144.9	3.6
130°-140°	76.7	1.9
140°-150°	45.6	1.1
150°-160°	28.1	0.7
160°-170°	15.3	0.4
170°-180°	5.0	0.1
0°-90°	3232.0	81.1
0°-180°	3984.7	100.0



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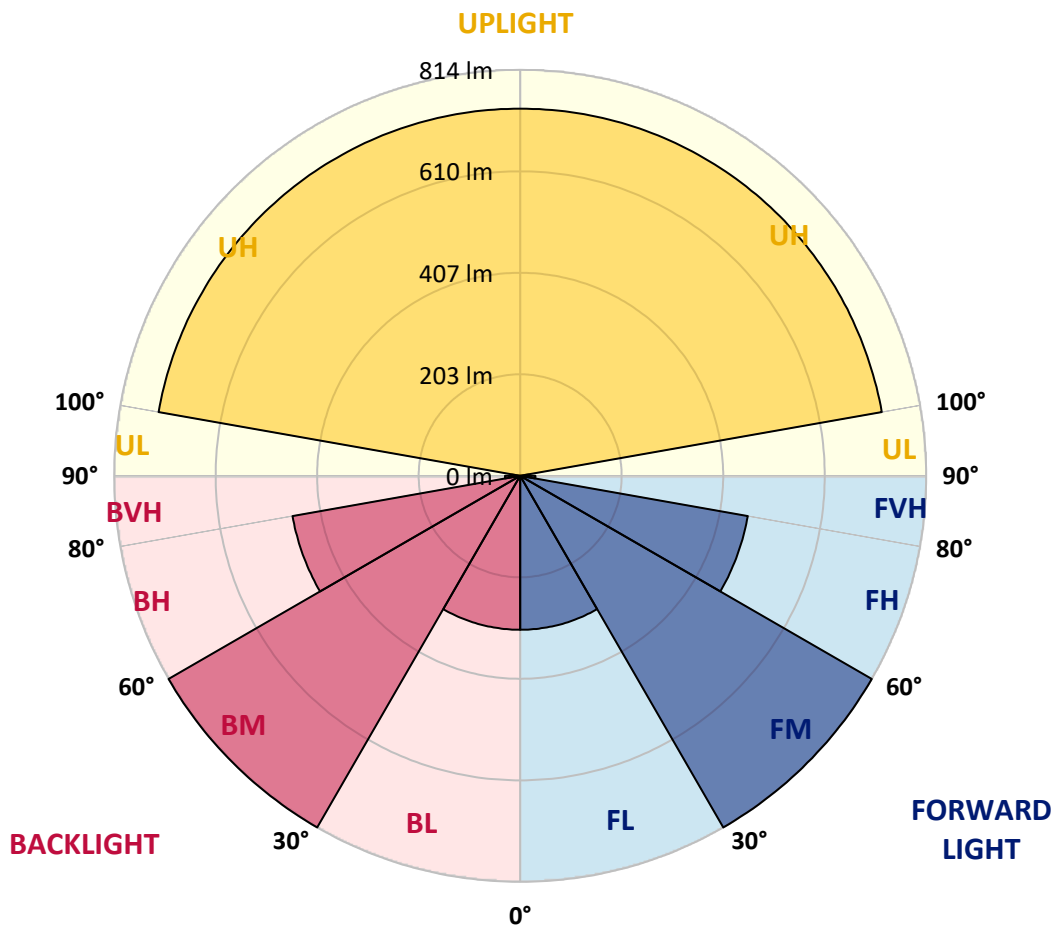
CATALOG NUMBER: TTN-D1-735-U-MQ-CG-UPL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.5	7.7			
FM (30°-60°)	813.7	20.4			
FH (60°-80°)	463.3	11.6			G0/660
FVH (80°-90°)	30.5	0.8			G1/100
BL (0°-30°)	308.5	7.7	B1/500		
BM (30°-60°)	813.7	20.4	B1/1000		
BH (60°-80°)	463.3	11.6	B1/500		G0/660
BVH (80°-90°)	30.5	0.8			G1/100
UL (90°-100°)	16.8	0.4		U2/50	
UH (100°-180°)	735.8	18.5		U4/1000	

BUG Rating: B1-U4-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6
2.5°	760.8	763.4	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	763.4
5°	763.4	763.4	763.4	763.4	760.8	760.8	760.8	760.8	760.8	763.4	763.4
7.5°	755.5	755.5	755.5	755.5	755.5	752.9	755.5	755.5	755.5	755.5	755.5
10°	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7
12.5°	742.4	742.4	742.4	742.4	742.4	742.4	742.4	742.4	742.4	739.8	739.8
15°	737.2	737.2	737.2	737.2	739.8	739.8	737.2	737.2	737.2	737.2	737.2
17.5°	731.9	731.9	731.9	731.9	734.5	734.5	734.5	731.9	731.9	731.9	731.9
20°	726.7	726.7	726.7	726.7	729.3	729.3	729.3	729.3	729.3	726.7	726.7
22.5°	724.1	724.1	724.1	724.1	726.7	726.7	726.7	726.7	724.1	724.1	724.1
25°	721.4	724.1	724.1	724.1	726.7	729.3	729.3	726.7	724.1	721.4	721.4
27.5°	724.1	724.1	724.1	726.7	726.7	729.3	729.3	726.7	724.1	724.1	724.1
30°	721.4	721.4	721.4	724.1	726.7	729.3	726.7	726.7	724.1	721.4	721.4
32.5°	716.2	716.2	718.8	721.4	724.1	724.1	724.1	721.4	718.8	716.2	716.2
35°	710.9	710.9	710.9	713.6	718.8	718.8	718.8	716.2	713.6	710.9	708.3
37.5°	703.1	705.7	705.7	710.9	713.6	716.2	713.6	710.9	705.7	703.1	703.1
40°	697.8	697.8	700.4	705.7	710.9	710.9	708.3	705.7	700.4	697.8	697.8
42.5°	689.9	689.9	695.2	700.4	708.3	708.3	705.7	700.4	695.2	689.9	689.9
45°	689.9	689.9	695.2	705.7	710.9	716.2	710.9	705.7	695.2	689.9	687.3
47.5°	692.6	692.6	697.8	710.9	721.4	726.7	718.8	708.3	697.8	692.6	689.9
50°	687.3	689.9	700.4	713.6	726.7	729.3	726.7	710.9	700.4	687.3	687.3
52.5°	689.9	689.9	703.1	724.1	737.2	742.4	737.2	724.1	700.4	687.3	687.3
55°	684.7	682.1	700.4	724.1	745.0	755.5	745.0	724.1	697.8	682.1	679.5
57.5°	661.1	661.1	684.7	708.3	734.5	739.8	731.9	708.3	682.1	661.1	655.8
60°	629.6	632.2	655.8	682.1	705.7	708.3	703.1	682.1	655.8	632.2	624.4
62.5°	595.5	600.8	624.4	650.6	679.5	684.7	676.8	650.6	619.1	603.4	590.3
65°	545.7	553.5	579.8	608.6	640.1	637.5	637.5	606.0	582.4	556.2	543.0
67.5°	490.6	498.4	516.8	556.2	582.4	579.8	577.1	556.2	516.8	498.4	490.6
70°	430.2	435.5	453.8	493.2	516.8	519.4	511.6	490.6	453.8	440.7	427.6
72.5°	359.4	362.0	388.3	419.7	443.4	440.7	438.1	419.7	385.6	372.5	356.8
75°	283.3	285.9	309.6	338.4	356.8	354.2	351.5	338.4	309.6	293.8	280.7
77.5°	212.5	209.9	233.5	254.5	265.0	267.6	262.3	251.8	230.9	217.7	209.9
80°	139.0	136.4	157.4	173.1	181.0	181.0	178.4	170.5	154.8	144.3	139.0
82.5°	78.7	76.1	89.2	99.7	107.6	104.9	102.3	97.1	89.2	81.3	76.1
85°	28.9	28.9	36.7	42.0	47.2	47.2	44.6	42.0	34.1	31.5	28.9
87.5°	2.6	2.6	5.2	7.9	7.9	7.9	5.2	5.2	2.6	2.6	2.6
90°	6.4	6.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.4	6.4
92.5°	6.4	6.4	6.4	9.0	10.3	9.0	10.3	7.7	7.7	6.4	6.4
95°	7.7	7.7	9.0	11.6	14.2	15.5	15.5	9.0	9.0	7.7	7.7
97.5°	10.3	11.6	11.6	14.2	23.2	42.5	25.8	12.9	12.9	11.6	10.3
100°	16.7	18.0	18.0	32.2	68.2	91.4	65.7	33.5	24.5	18.0	18.0
102.5°	54.1	56.7	69.5	104.3	154.5	140.4	118.5	112.0	77.3	61.8	59.2
105°	137.8	136.5	146.8	173.8	216.3	212.5	195.7	177.7	153.2	141.6	141.6
107.5°	181.6	181.6	190.6	213.8	245.9	287.1	291.0	230.5	202.2	189.3	188.0
110°	204.7	204.7	212.5	231.8	274.3	332.2	329.6	284.6	249.8	233.1	230.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	209.9	211.2	221.5	251.1	297.5	323.2	311.6	293.6	278.1	265.3	262.7
115°	217.6	217.6	229.2	257.5	283.3	293.6	280.7	266.5	256.2	251.1	253.7
117.5°	215.0	218.9	221.5	236.9	253.7	261.4	255.0	235.6	227.9	225.3	221.5
120°	199.6	199.6	202.2	209.9	218.9	222.8	220.2	207.3	200.9	199.6	197.0
122.5°	177.7	179.0	177.7	181.6	188.0	191.9	189.3	179.0	176.4	176.4	173.8
125°	155.8	155.8	154.5	157.1	161.0	159.7	161.0	155.8	154.5	154.5	153.2
127.5°	140.4	139.1	136.5	137.8	139.1	139.1	140.4	135.2	136.5	137.8	136.5
130°	124.9	124.9	122.3	122.3	122.3	119.8	122.3	119.8	121.0	122.3	123.6
132.5°	110.7	110.7	106.9	105.6	105.6	105.6	106.9	105.6	108.2	110.7	110.7
135°	99.2	99.2	95.3	96.6	96.6	95.3	96.6	95.3	97.9	99.2	99.2
137.5°	90.1	90.1	87.6	87.6	87.6	86.3	87.6	87.6	88.8	91.4	92.7
140°	82.4	82.4	81.1	81.1	79.8	81.1	81.1	81.1	82.4	83.7	83.7
142.5°	78.5	77.3	76.0	74.7	76.0	76.0	76.0	74.7	76.0	78.5	78.5
145°	72.1	72.1	70.8	70.8	70.8	72.1	70.8	70.8	72.1	72.1	73.4
147.5°	68.2	68.2	67.0	68.2	68.2	68.2	68.2	67.0	68.2	68.2	69.5
150°	67.0	65.7	64.4	65.7	65.7	64.4	64.4	64.4	64.4	65.7	65.7
152.5°	63.1	63.1	61.8	63.1	61.8	61.8	61.8	61.8	61.8	63.1	64.4
155°	60.5	60.5	59.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
157.5°	57.9	59.2	57.9	57.9	57.9	57.9	57.9	57.9	57.9	59.2	59.2
160°	56.7	56.7	56.7	56.7	55.4	55.4	55.4	56.7	56.7	56.7	57.9
162.5°	55.4	55.4	55.4	55.4	54.1	54.1	54.1	54.1	55.4	55.4	56.7
165°	55.4	54.1	54.1	54.1	52.8	52.8	52.8	52.8	54.1	55.4	54.1
167.5°	52.8	52.8	52.8	52.8	52.8	51.5	51.5	52.8	52.8	52.8	54.1
170°	52.8	52.8	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	52.8
172.5°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	51.5	51.5	52.8	52.8
175°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	52.8	52.8	52.8	51.5
177.5°	52.8	52.8	52.8	52.8	51.5	52.8	52.8	52.8	52.8	52.8	52.8
180°	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8

(END OF REPORT)