

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: P833163

Luminaire Tested: **TTN-D1-735-U-CQ-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833163  
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-CQ-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND CONCENTRATED DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

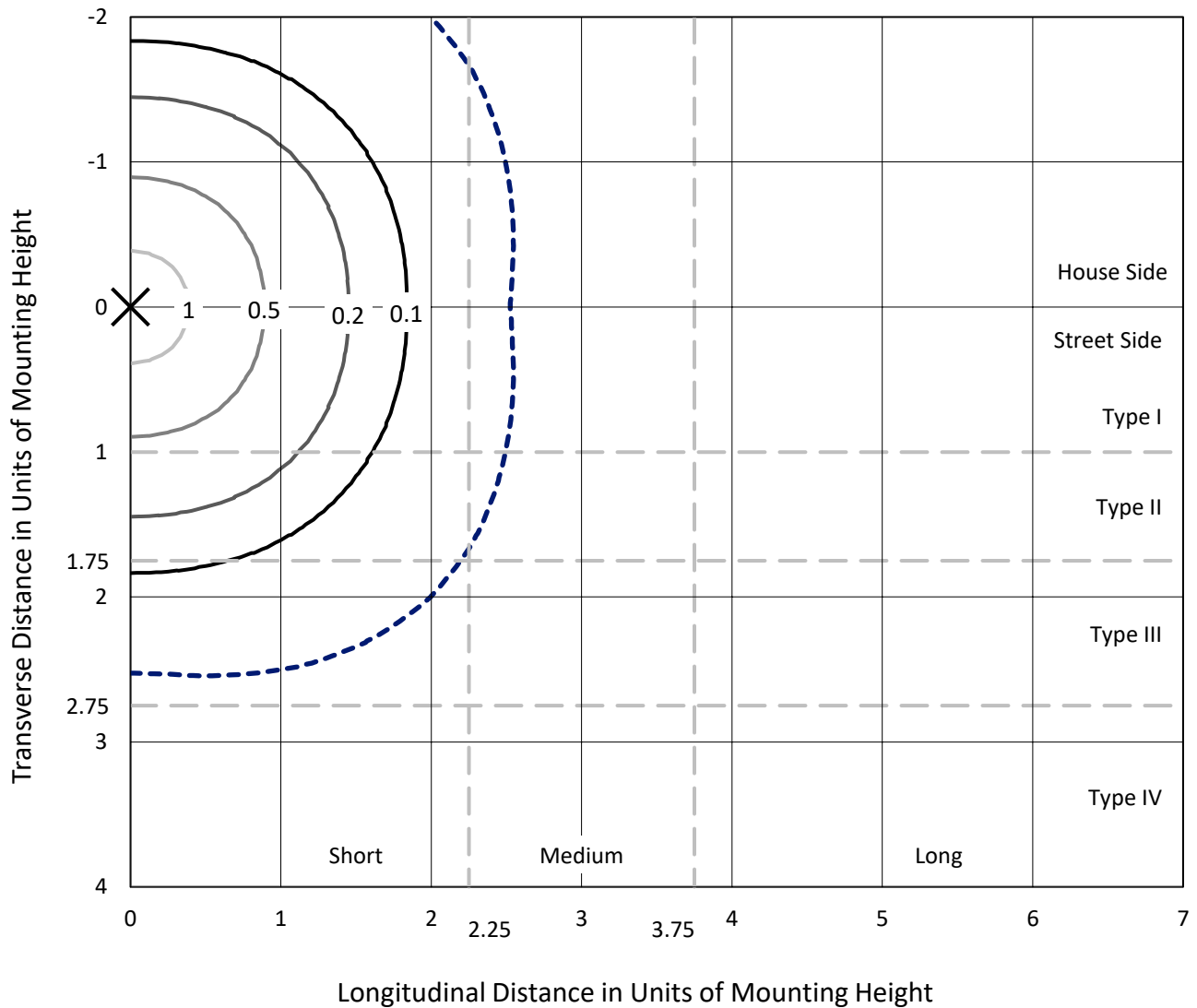
Lumens per Lamp: N/A  
Luminaire Lumens: 3958.7 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

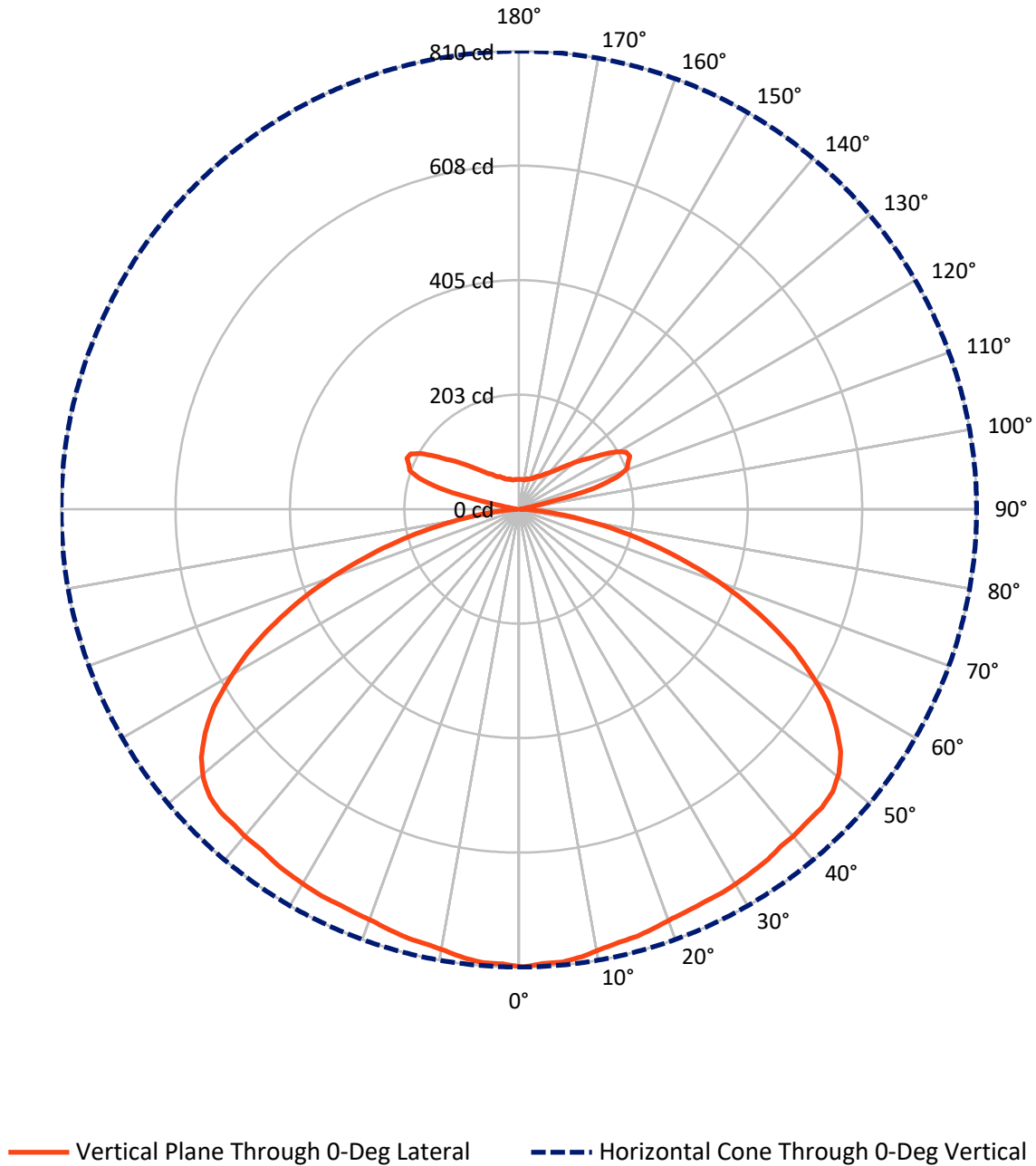
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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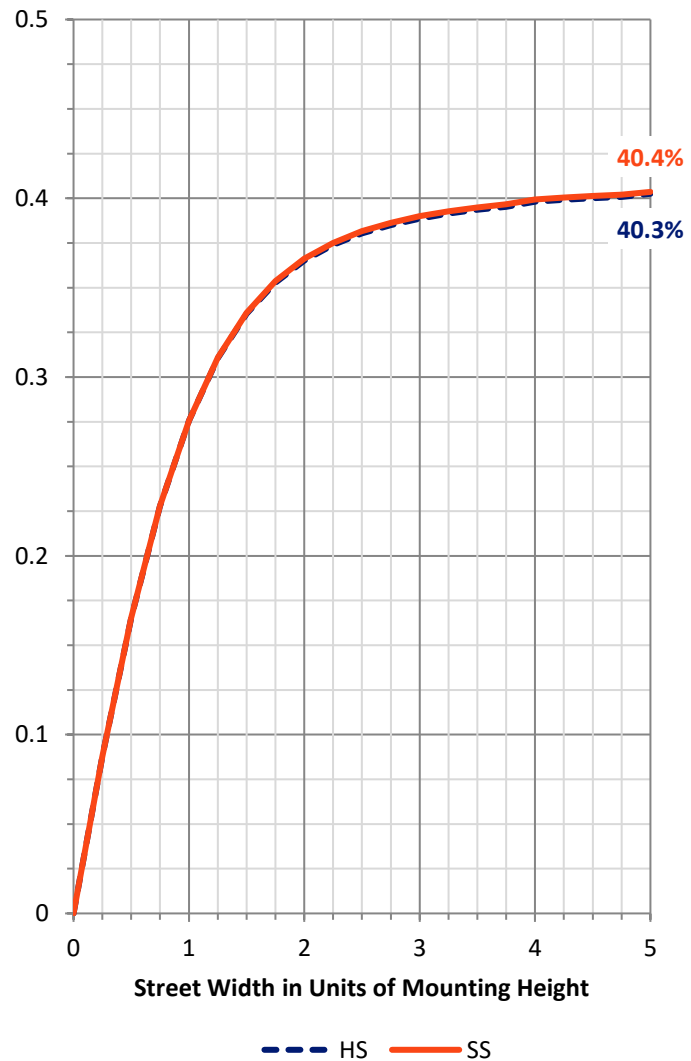
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1603.0	376.3	1979.3
	% Fixture	40.5	9.5	50.0
<b>Street Side</b>	Lumens	1603.0	376.3	1979.3
	% Fixture	40.5	9.5	50.0
<b>Total</b>	Lumens	3206.0	752.7	3958.7
	% Fixture	81.0	19.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	1.9
10°-20°	221.9	5.6
20°-30°	357.3	9.0
30°-40°	480.6	12.1
40°-50°	592.9	15.0
50°-60°	636.1	16.1
60°-70°	515.8	13.0
70°-80°	273.4	6.9
80°-90°	51.6	1.3
90°-100°	16.8	0.4
100°-110°	170.7	4.3
110°-120°	249.6	6.3
120°-130°	144.9	3.7
130°-140°	76.7	1.9
140°-150°	45.6	1.2
150°-160°	28.1	0.7
160°-170°	15.3	0.4
170°-180°	5.0	0.1
0°-90°	3206.0	81.0
0°-180°	3958.7	100.0

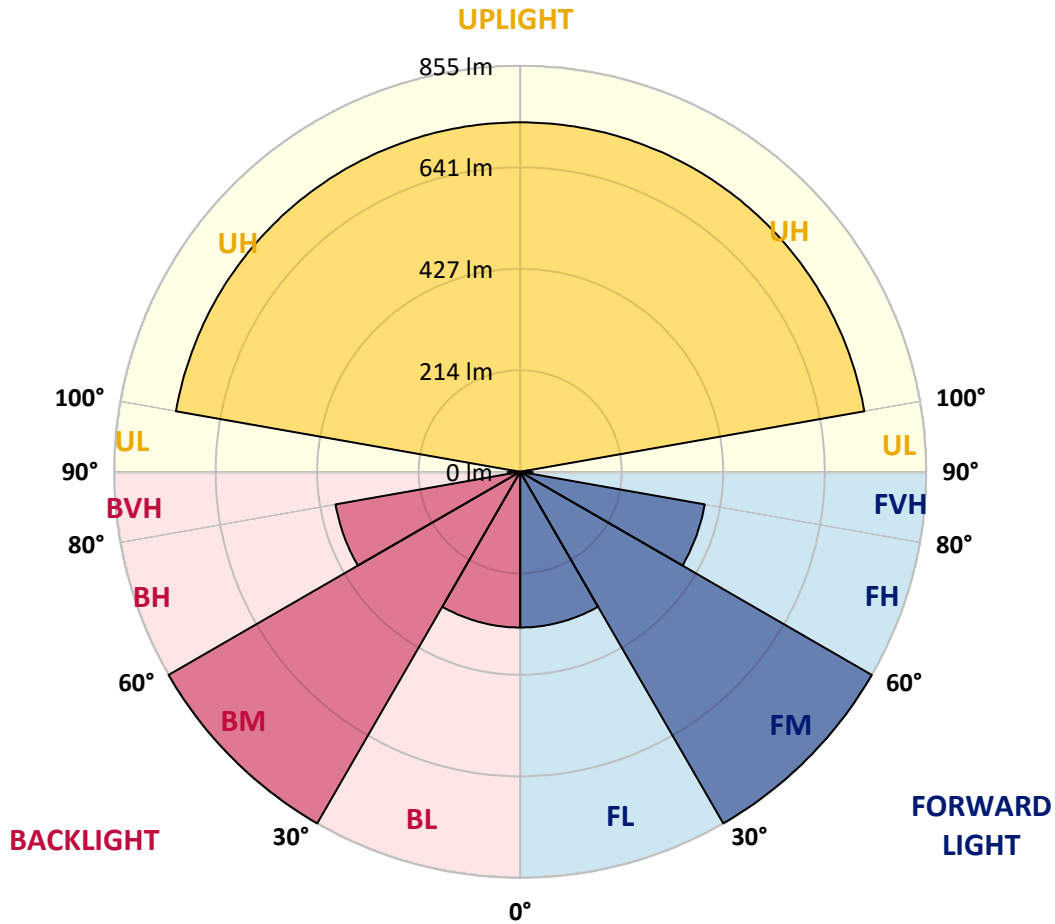


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	327.8	8.3			
FM (30°-60°)	854.8	21.6			
FH (60°-80°)	394.6	10.0			G0/660
FVH (80°-90°)	25.8	0.7			G1/100
BL (0°-30°)	327.8	8.3	B1/500		
BM (30°-60°)	854.8	21.6	B1/1000		
BH (60°-80°)	394.6	10.0	B1/500		G0/660
BVH (80°-90°)	25.8	0.7			G1/100
UL (90°-100°)	16.8	0.4		U2/50	
UH (100°-180°)	735.8	18.6		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°	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4
2.5°	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	807.8
5°	805.2	805.2	805.2	805.2	802.6	805.2	805.2	805.2	805.2	805.2	805.2
7.5°	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9
10°	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1
12.5°	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8
15°	784.2	784.2	784.2	784.2	784.2	784.2	784.2	784.2	784.2	781.6	781.6
17.5°	779.0	779.0	779.0	779.0	781.6	781.6	781.6	779.0	779.0	779.0	779.0
20°	773.7	773.7	773.7	776.3	776.3	776.3	776.3	776.3	773.7	773.7	773.7
22.5°	771.1	771.1	771.1	771.1	773.7	773.7	773.7	773.7	771.1	771.1	771.1
25°	768.5	768.5	771.1	771.1	773.7	773.7	773.7	771.1	771.1	768.5	768.5
27.5°	768.5	768.5	771.1	771.1	773.7	773.7	773.7	773.7	771.1	768.5	768.5
30°	765.8	768.5	768.5	771.1	773.7	773.7	773.7	771.1	768.5	765.8	765.8
32.5°	763.2	763.2	765.8	768.5	771.1	771.1	771.1	768.5	765.8	763.2	760.6
35°	760.6	760.6	760.6	765.8	768.5	768.5	768.5	765.8	760.6	758.0	758.0
37.5°	755.4	758.0	760.6	763.2	768.5	768.5	768.5	763.2	758.0	755.4	752.7
40°	755.4	755.4	760.6	763.2	771.1	771.1	768.5	763.2	758.0	752.7	750.1
42.5°	752.7	755.4	760.6	768.5	776.3	776.3	773.7	765.8	758.0	752.7	750.1
45°	752.7	752.7	760.6	771.1	781.6	784.2	779.0	771.1	760.6	750.1	750.1
47.5°	747.5	747.5	758.0	771.1	784.2	786.8	784.2	771.1	758.0	750.1	747.5
50°	734.4	734.4	747.5	763.2	779.0	784.2	779.0	768.5	750.1	739.6	737.0
52.5°	713.4	713.4	726.5	747.5	763.2	771.1	765.8	752.7	734.4	718.6	716.0
55°	681.9	684.5	697.7	721.3	739.6	747.5	742.2	726.5	705.5	689.8	684.5
57.5°	645.2	645.2	663.6	687.2	705.5	713.4	708.1	692.4	668.8	653.1	647.8
60°	595.4	598.0	613.7	645.2	663.6	671.4	666.2	647.8	621.6	603.2	598.0
62.5°	545.5	548.2	563.9	590.1	611.1	616.3	611.1	592.7	569.1	550.8	545.5
65°	487.8	490.5	508.8	532.4	548.2	556.0	548.2	532.4	511.4	493.1	490.5
67.5°	427.5	430.1	448.5	469.5	485.2	490.5	482.6	469.5	448.5	432.8	427.5
70°	364.6	367.2	382.9	401.3	414.4	419.6	414.4	398.7	382.9	367.2	364.6
72.5°	299.0	301.6	317.4	333.1	343.6	348.8	341.0	330.5	314.7	301.6	299.0
75°	236.0	236.0	249.2	262.3	272.8	275.4	270.1	262.3	249.2	238.7	233.4
77.5°	175.7	175.7	188.8	196.7	202.0	207.2	202.0	194.1	186.2	175.7	175.7
80°	118.0	118.0	128.5	133.8	139.0	141.6	139.0	133.8	128.5	120.6	118.0
82.5°	70.8	70.8	76.1	81.3	81.3	83.9	83.9	81.3	76.1	70.8	70.8
85°	31.5	28.9	34.1	36.7	36.7	39.3	39.3	36.7	34.1	31.5	31.5
87.5°	2.6	5.2	5.2	7.9	7.9	7.9	7.9	7.9	5.2	5.2	5.2
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)