

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: P833187

Luminaire Tested: **TTN-D1-735-U-WQ-SG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833187  
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-WQ-SG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

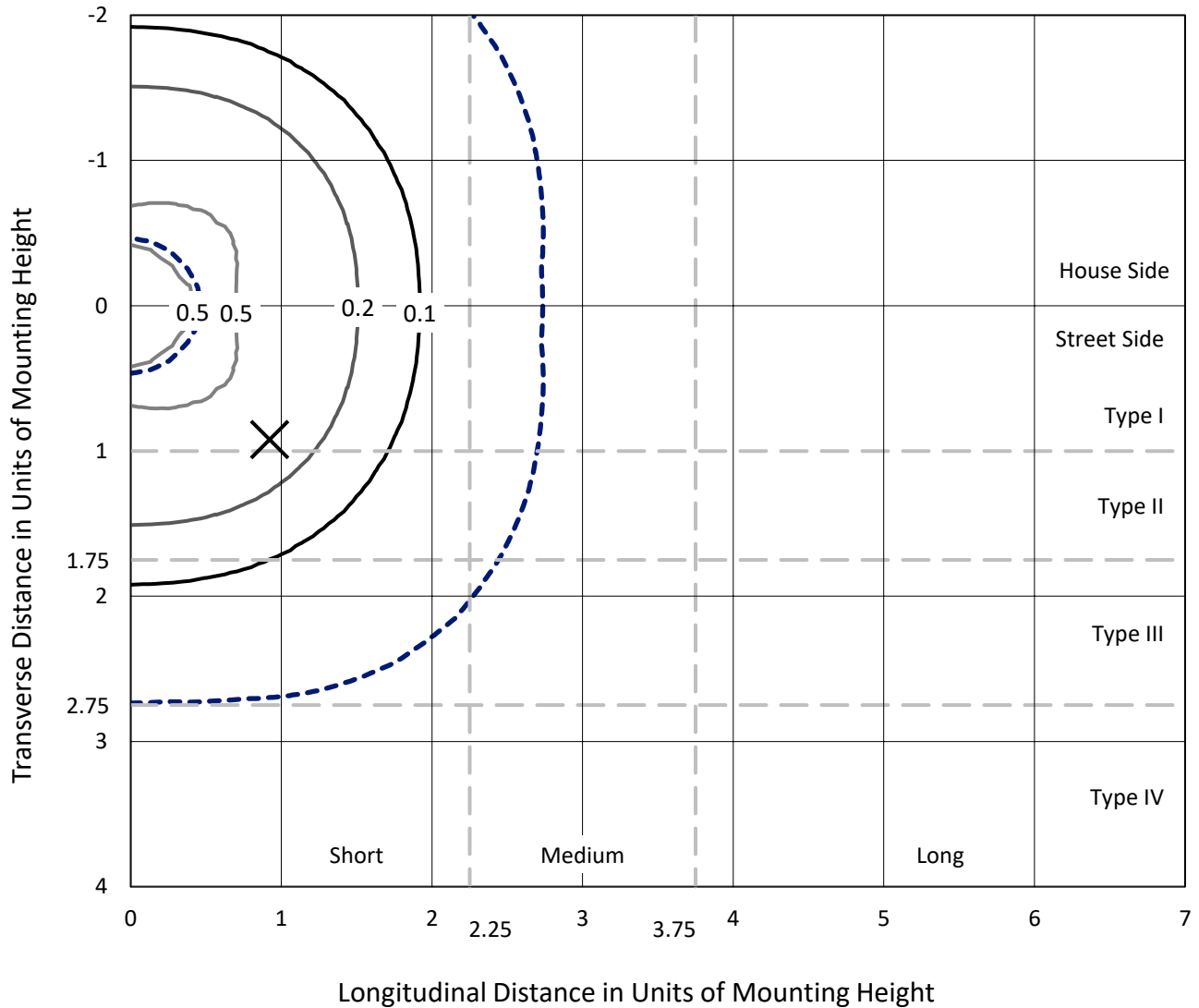
Lumens per Lamp: N/A  
Luminaire Lumens: 3719.7 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

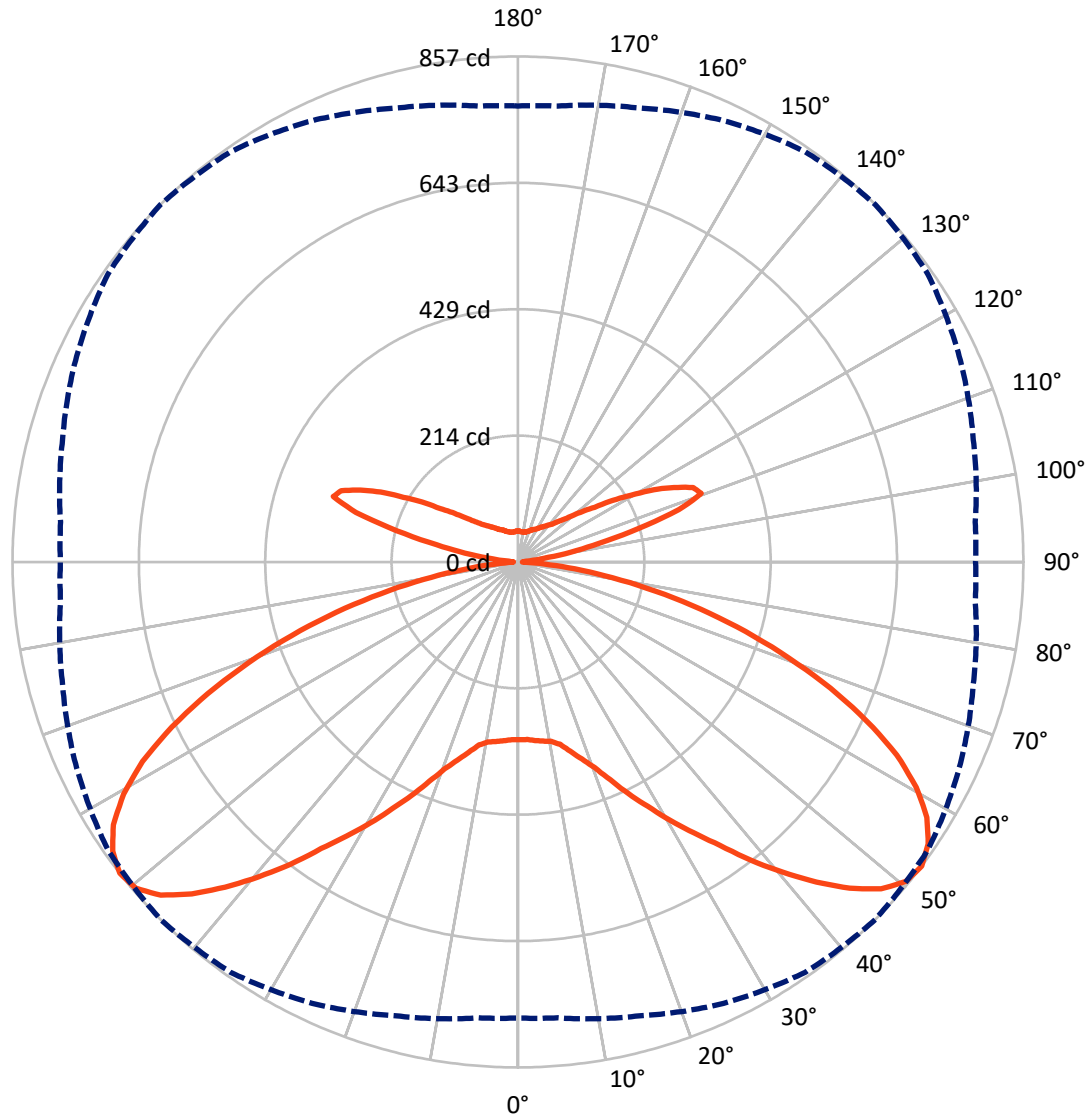
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 52.5-Deg Vertical

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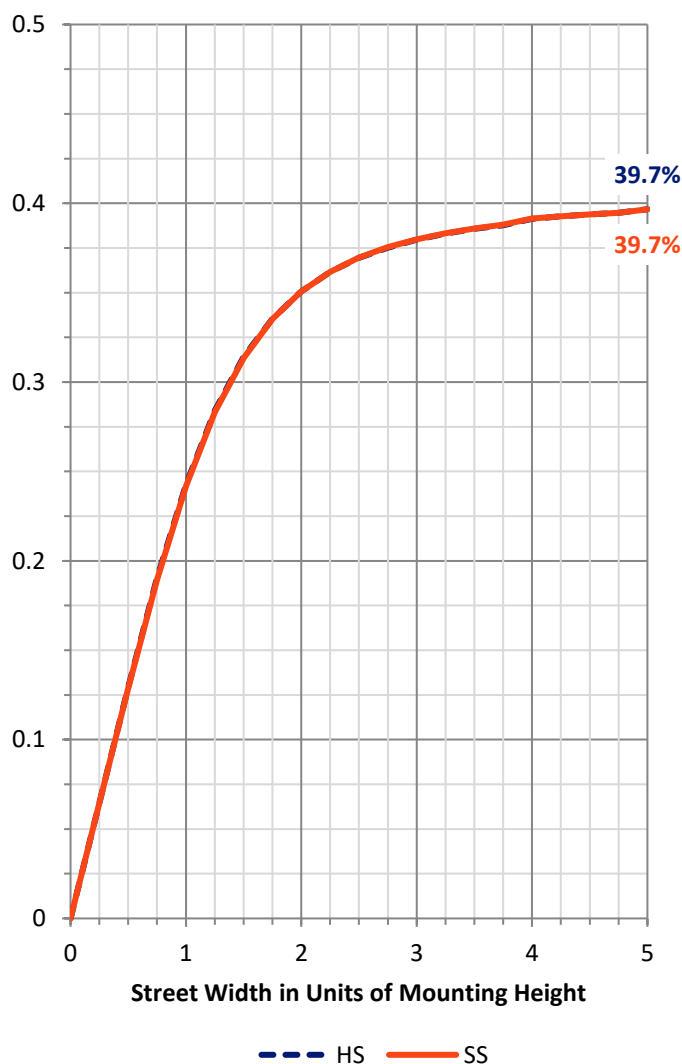
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1483.5	376.3	1859.8
	% Fixture	39.9	10.1	50.0
<b>Street Side</b>	Lumens	1483.5	376.3	1859.8
	% Fixture	39.9	10.1	50.0
<b>Total</b>	Lumens	2967.0	752.7	3719.7
	% Fixture	79.8	20.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	0.8
10°-20°	95.7	2.6
20°-30°	202.0	5.4
30°-40°	369.0	9.9
40°-50°	587.4	15.8
50°-60°	710.3	19.1
60°-70°	597.3	16.1
70°-80°	316.6	8.5
80°-90°	59.6	1.6
90°-100°	16.8	0.5
100°-110°	170.7	4.6
110°-120°	249.6	6.7
120°-130°	144.9	3.9
130°-140°	76.7	2.1
140°-150°	45.6	1.2
150°-160°	28.1	0.8
160°-170°	15.3	0.4
170°-180°	5.0	0.1
0°-90°	2967.0	79.8
0°-180°	3719.7	100.0

**Coefficient of Utilization**

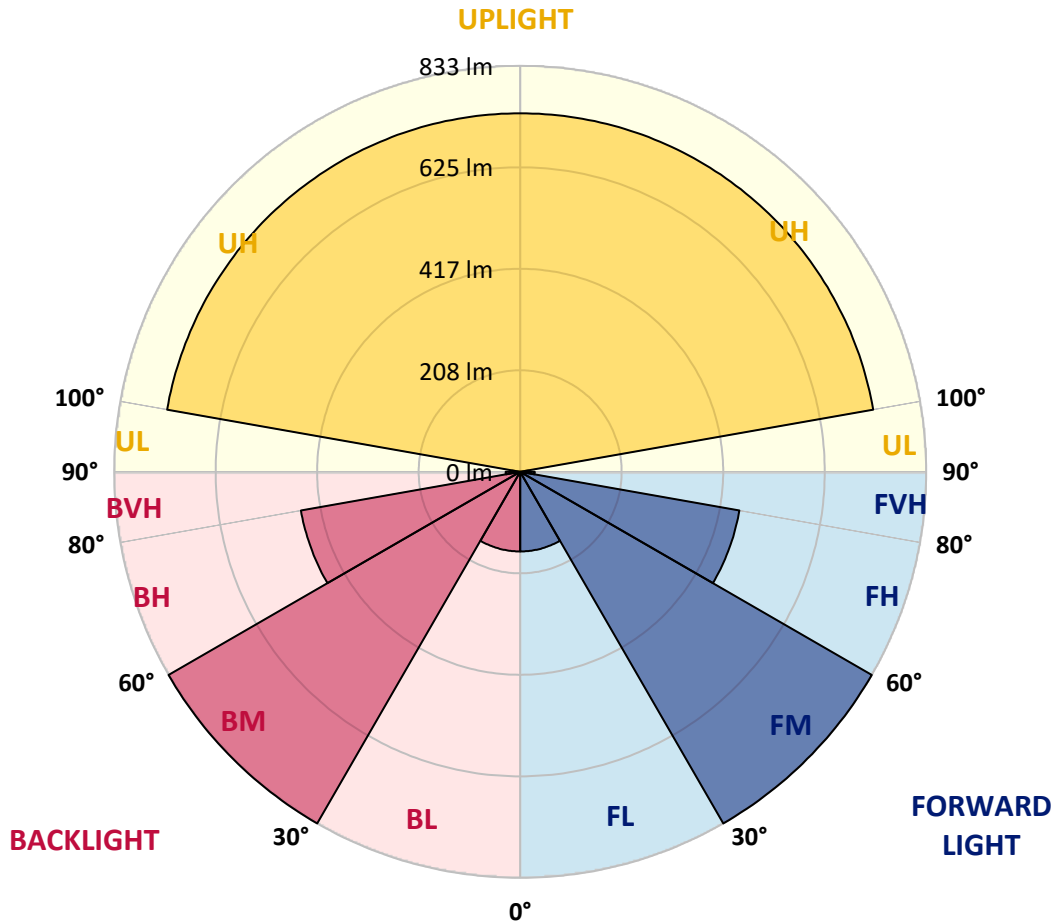


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	163.4	4.4			
FM (30°-60°)	833.4	22.4			
FH (60°-80°)	456.9	12.3			G0/660
FVH (80°-90°)	29.8	0.8			G1/100
BL (0°-30°)	163.4	4.4	B1/500		
BM (30°-60°)	833.4	22.4	B1/1000		
BH (60°-80°)	456.9	12.3	B1/500		G0/660
BVH (80°-90°)	29.8	0.8			G1/100
UL (90°-100°)	16.8	0.5		U2/50	
UH (100°-180°)	735.8	19.8		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°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
2.5°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
5°	304.2	304.2	301.5	304.2	304.2	304.2	304.2	304.2	304.2	304.2	304.2
7.5°	304.2	304.2	304.2	306.8	306.8	306.8	306.8	304.2	304.2	304.2	304.2
10°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
12.5°	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3
15°	330.4	330.4	330.4	330.4	333.0	333.0	333.0	330.4	330.4	330.4	330.4
17.5°	346.1	346.1	348.7	348.7	351.4	351.4	351.4	348.7	346.1	348.7	346.1
20°	369.7	369.7	369.7	372.3	375.0	375.0	375.0	369.7	369.7	369.7	369.7
22.5°	395.9	395.9	395.9	398.6	401.2	401.2	401.2	395.9	395.9	395.9	395.9
25°	427.4	427.4	427.4	430.0	432.7	435.3	435.3	430.0	427.4	427.4	424.8
27.5°	458.9	458.9	464.1	466.7	469.4	469.4	469.4	464.1	461.5	461.5	461.5
30°	495.6	495.6	500.8	503.4	508.7	508.7	508.7	500.8	498.2	495.6	495.6
32.5°	529.7	532.3	537.5	542.8	548.0	548.0	550.6	540.2	534.9	532.3	532.3
35°	566.4	569.0	574.2	582.1	587.4	590.0	592.6	582.1	574.2	571.6	571.6
37.5°	608.3	611.0	618.8	626.7	637.2	642.4	645.0	629.3	616.2	611.0	611.0
40°	655.5	658.2	666.0	676.5	687.0	692.2	694.9	679.1	666.0	660.8	658.2
42.5°	694.9	700.1	708.0	723.7	734.2	742.1	742.1	723.7	708.0	700.1	700.1
45°	731.6	736.8	749.9	765.7	781.4	789.3	786.6	768.3	749.9	739.4	736.8
47.5°	760.4	765.7	781.4	799.8	820.7	828.6	826.0	805.0	781.4	768.3	765.7
50°	776.2	778.8	797.1	823.4	844.3	852.2	846.9	826.0	799.8	781.4	778.8
52.5°	773.5	776.2	797.1	826.0	849.6	857.4	849.6	826.0	799.8	778.8	776.2
55°	757.8	760.4	781.4	812.9	836.5	844.3	836.5	812.9	784.0	763.0	760.4
57.5°	729.0	731.6	752.6	784.0	810.2	818.1	807.6	781.4	752.6	731.6	731.6
60°	687.0	689.6	710.6	744.7	768.3	776.2	763.0	742.1	713.2	689.6	687.0
62.5°	631.9	631.9	655.5	689.6	710.6	721.1	708.0	684.4	658.2	631.9	634.6
65°	566.4	563.8	587.4	618.8	642.4	650.3	637.2	616.2	590.0	566.4	566.4
67.5°	498.2	498.2	516.6	542.8	563.8	571.6	558.5	540.2	519.2	498.2	498.2
70°	424.8	424.8	437.9	464.1	482.5	487.7	479.9	461.5	443.1	424.8	424.8
72.5°	351.4	348.7	361.9	382.8	398.6	403.8	395.9	385.5	364.5	351.4	351.4
75°	277.9	275.3	283.2	301.5	314.7	319.9	312.0	304.2	288.4	277.9	277.9
77.5°	207.1	204.5	212.4	228.1	236.0	238.6	233.4	228.1	215.0	207.1	207.1
80°	141.6	139.0	144.2	154.7	162.6	162.6	160.0	157.3	146.8	141.6	144.2
82.5°	83.9	81.3	86.5	94.4	99.6	97.0	97.0	94.4	86.5	83.9	83.9
85°	36.7	34.1	36.7	42.0	47.2	44.6	44.6	44.6	39.3	36.7	36.7
87.5°	5.2	5.2	5.2	7.9	10.5	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)