

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: P833190

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

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833190  
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-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

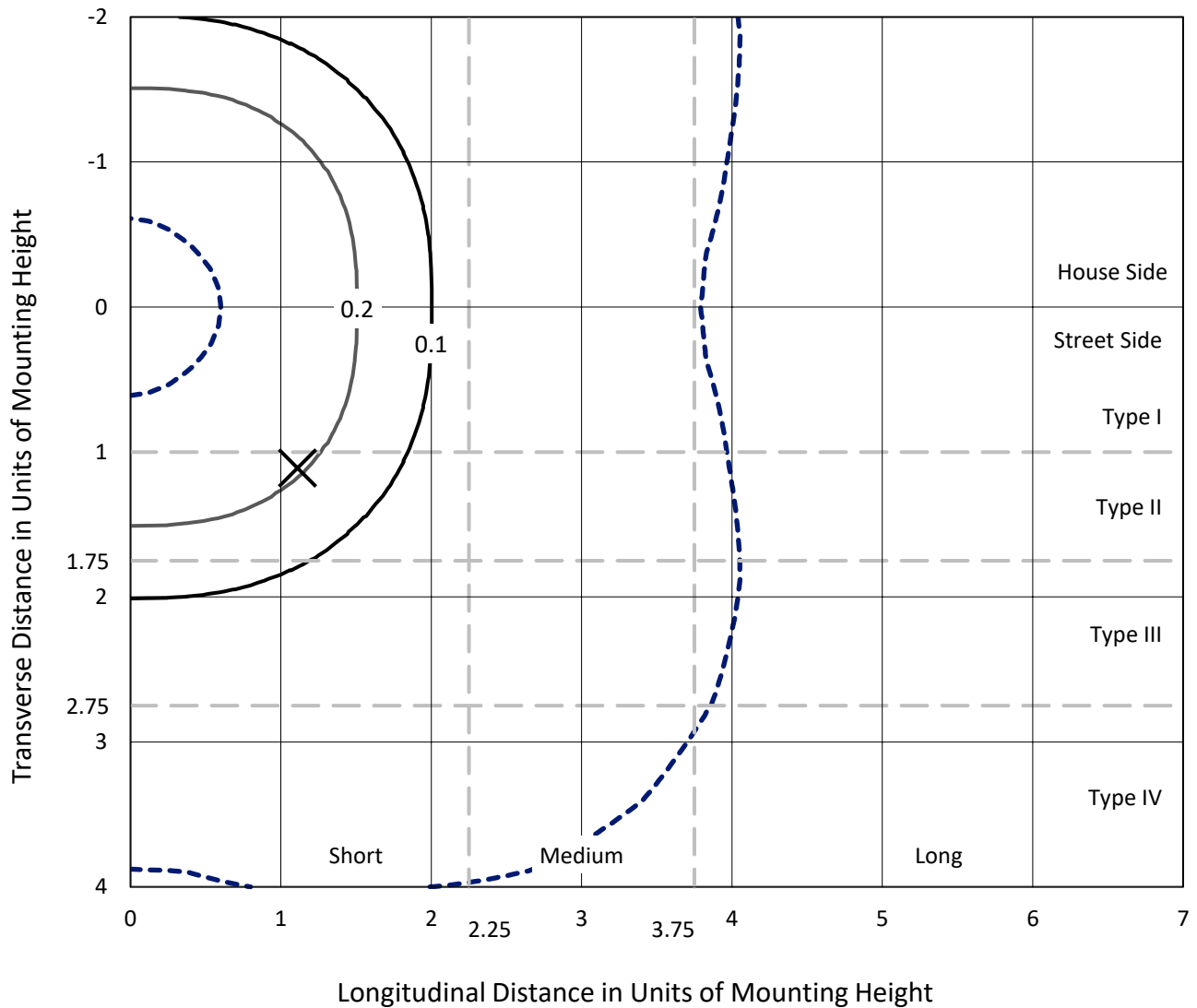
Lumens per Lamp: N/A  
Luminaire Lumens: 3939.7 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

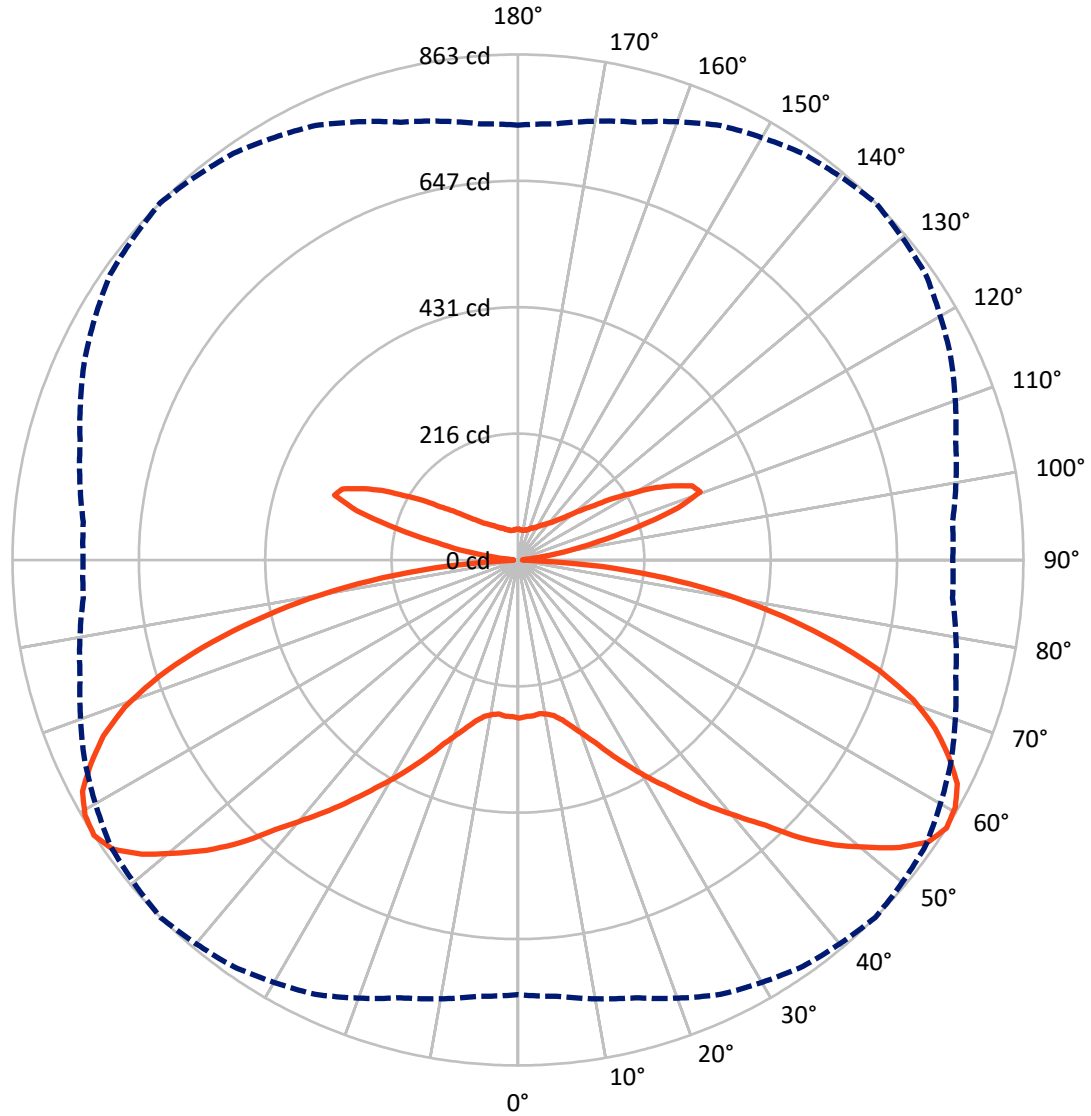
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.4 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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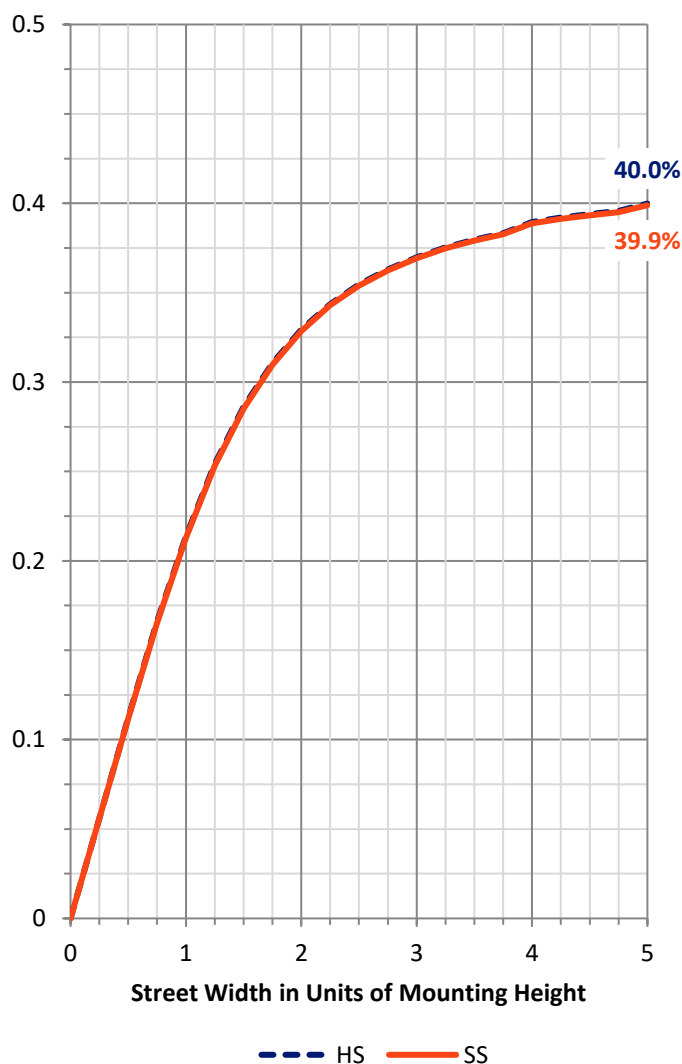
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1593.5	376.3	1969.8
	% Fixture	40.4	9.6	50.0
<b>Street Side</b>	Lumens	1593.5	376.3	1969.8
	% Fixture	40.4	9.6	50.0
<b>Total</b>	Lumens	3187.0	752.7	3939.7
	% Fixture	80.9	19.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.4	0.6
10°-20°	81.0	2.1
20°-30°	170.0	4.3
30°-40°	308.3	7.8
40°-50°	502.7	12.8
50°-60°	703.6	17.9
60°-70°	734.5	18.6
70°-80°	524.8	13.3
80°-90°	136.8	3.5
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°	3187.0	80.9
0°-180°	3939.7	100.0

**Coefficient of Utilization**



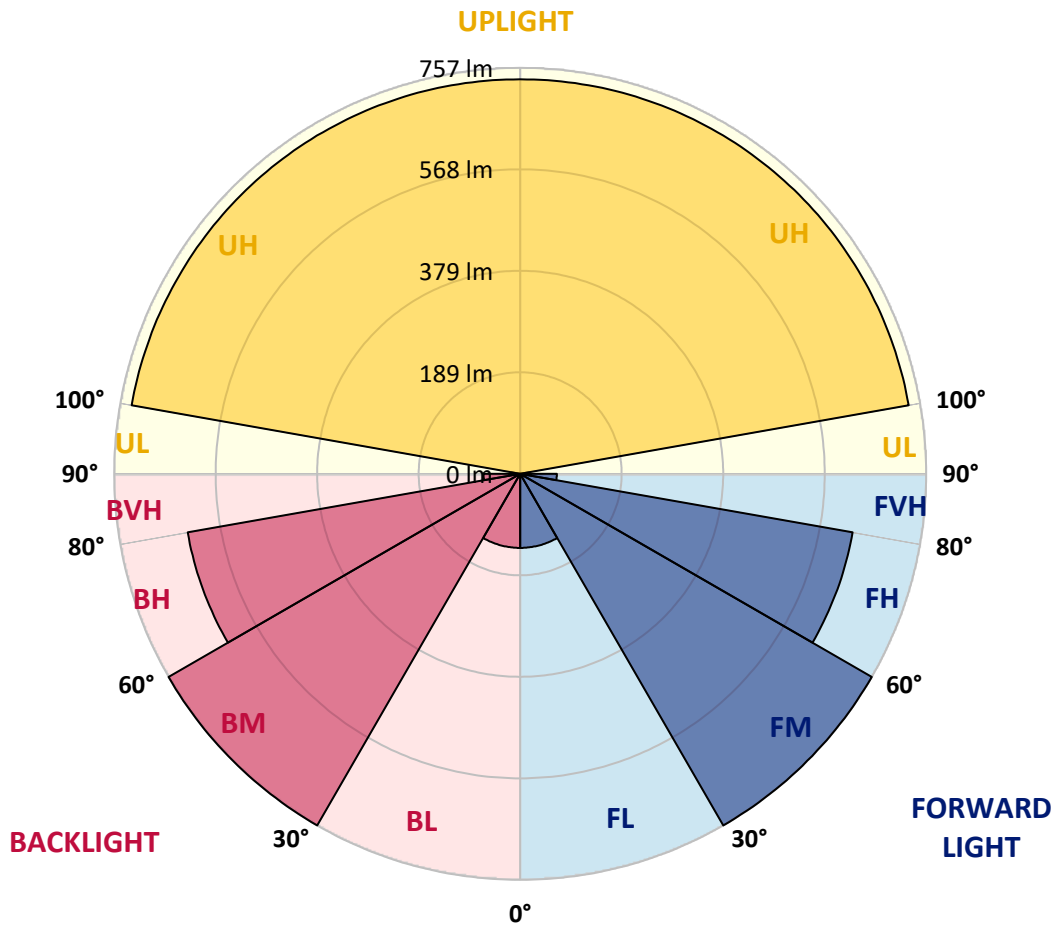
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	138.2	3.5			
FM	(30°-60°)	757.3	19.2			
FH	(60°-80°)	629.7	16.0			G0/660
FVH	(80°-90°)	68.4	1.7			G1/100
BL	(0°-30°)	138.2	3.5	B1/500		
BM	(30°-60°)	757.3	19.2	B1/1000		
BH	(60°-80°)	629.7	16.0	B2/1000		G0/660
BVH	(80°-90°)	68.4	1.7			G1/100
UL	(90°-100°)	16.8	0.4		U2/50	
UH	(100°-180°)	735.8	18.7		U4/1000	

**BUG Rating: B2-U4-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1
2.5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
7.5°	262.2	262.2	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8
10°	262.2	262.2	264.8	264.8	267.4	267.4	267.4	264.8	264.8	262.2	262.2
12.5°	267.4	267.4	267.4	270.1	272.7	272.7	272.7	270.1	270.1	267.4	267.4
15°	275.3	277.9	277.9	280.5	283.2	283.2	283.2	280.5	280.5	277.9	277.9
17.5°	291.0	291.0	291.0	293.7	296.3	298.9	298.9	293.7	293.7	291.0	293.7
20°	306.8	309.4	309.4	312.0	314.6	317.3	314.6	312.0	309.4	309.4	309.4
22.5°	330.4	330.4	333.0	333.0	338.2	338.2	338.2	333.0	333.0	333.0	333.0
25°	356.6	356.6	359.2	361.8	367.1	367.1	364.4	359.2	359.2	359.2	361.8
27.5°	388.0	388.0	390.7	390.7	395.9	395.9	393.3	390.7	390.7	390.7	393.3
30°	416.9	416.9	422.1	424.7	427.4	427.4	427.4	422.1	422.1	419.5	419.5
32.5°	443.1	445.7	448.3	456.2	461.5	458.8	461.5	456.2	451.0	448.3	448.3
35°	471.9	474.6	479.8	487.7	495.5	495.5	495.5	487.7	482.4	477.2	479.8
37.5°	506.0	506.0	513.9	521.8	532.2	534.9	532.2	524.4	516.5	511.3	511.3
40°	542.7	542.7	550.6	558.5	571.6	574.2	571.6	561.1	550.6	548.0	548.0
42.5°	579.4	579.4	589.9	597.8	613.5	618.8	613.5	600.4	589.9	582.1	584.7
45°	618.8	621.4	634.5	650.2	668.6	676.5	668.6	652.9	637.1	621.4	621.4
47.5°	663.3	663.3	679.1	697.4	718.4	726.3	715.8	700.1	679.1	666.0	666.0
50°	692.2	694.8	715.8	739.4	765.6	770.8	763.0	739.4	715.8	697.4	694.8
52.5°	721.0	723.6	747.2	781.3	807.5	815.4	804.9	781.3	747.2	723.6	723.6
55°	739.4	744.6	770.8	807.5	836.4	849.5	833.8	807.5	768.2	742.0	739.4
57.5°	742.0	747.2	773.5	818.0	846.9	862.6	849.5	815.4	773.5	744.6	742.0
60°	736.8	739.4	765.6	812.8	846.9	857.4	846.9	810.2	763.0	739.4	734.1
62.5°	723.6	728.9	755.1	794.4	833.8	841.6	831.1	791.8	752.5	723.6	718.4
65°	681.7	686.9	726.3	765.6	799.7	807.5	799.7	765.6	723.6	681.7	676.5
67.5°	634.5	637.1	676.5	723.6	755.1	768.2	755.1	726.3	673.8	634.5	629.3
70°	584.7	587.3	618.8	668.6	700.1	715.8	702.7	671.2	616.1	582.1	579.4
72.5°	527.0	527.0	558.5	597.8	629.3	645.0	634.5	595.2	553.2	519.1	513.9
75°	448.3	451.0	485.1	513.9	548.0	558.5	548.0	516.5	477.2	443.1	437.9
77.5°	367.1	369.7	398.5	422.1	453.6	461.5	453.6	427.4	390.7	361.8	359.2
80°	277.9	280.5	304.1	325.1	351.3	361.8	354.0	327.7	298.9	272.7	264.8
82.5°	180.9	183.5	207.1	222.9	246.5	254.3	249.1	225.5	201.9	175.7	173.0
85°	81.3	83.9	104.9	118.0	136.3	144.2	139.0	118.0	99.6	76.0	70.8
87.5°	7.9	7.9	7.9	7.9	7.9	10.5	10.5	7.9	7.9	7.9	7.9
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)