

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: P833220

Luminaire Tested: **TTN-D1-740-U-WQ-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833220  
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-D1-740-U-WQ-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

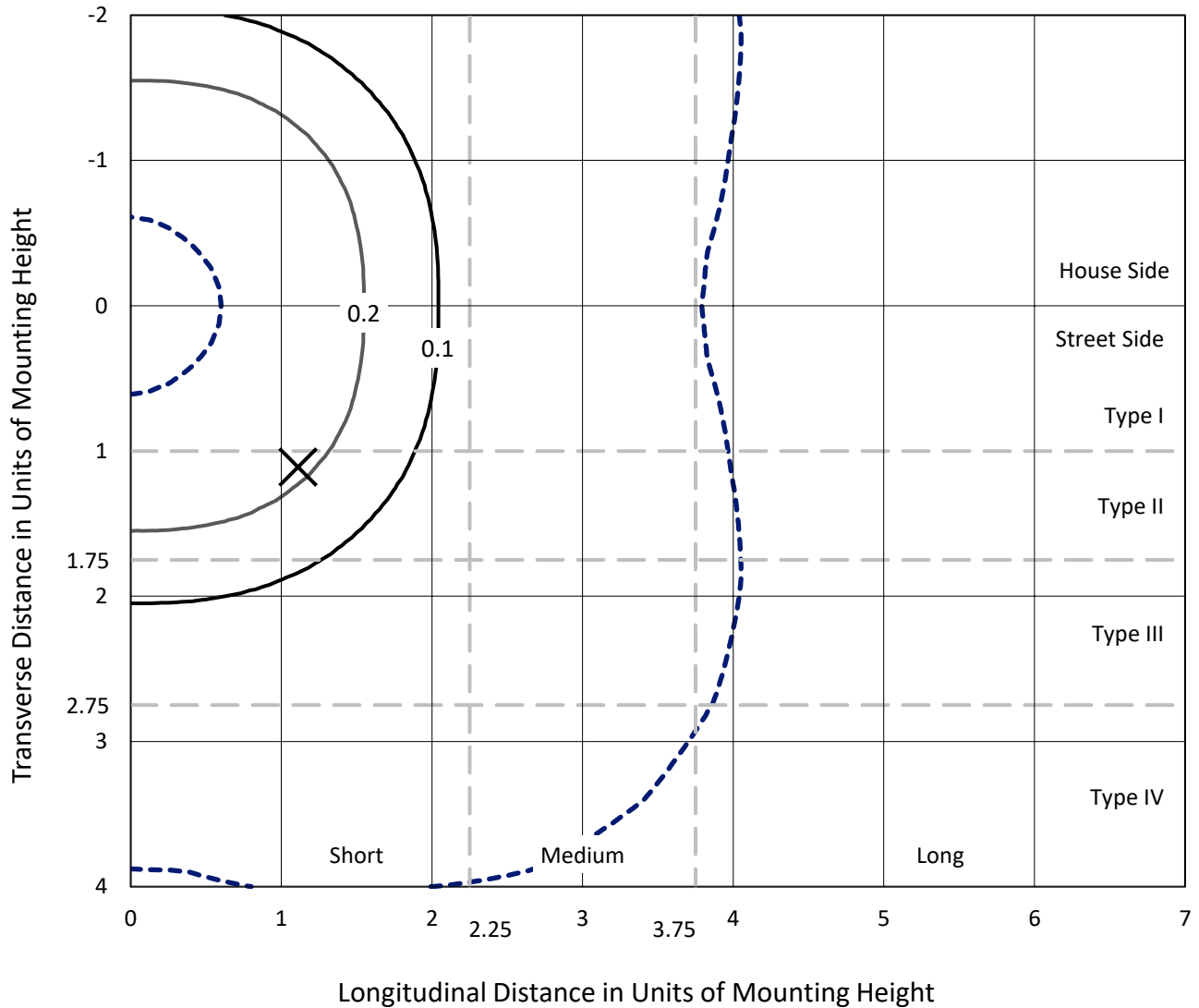
Lumens per Lamp: N/A  
Luminaire Lumens: 4173.6 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

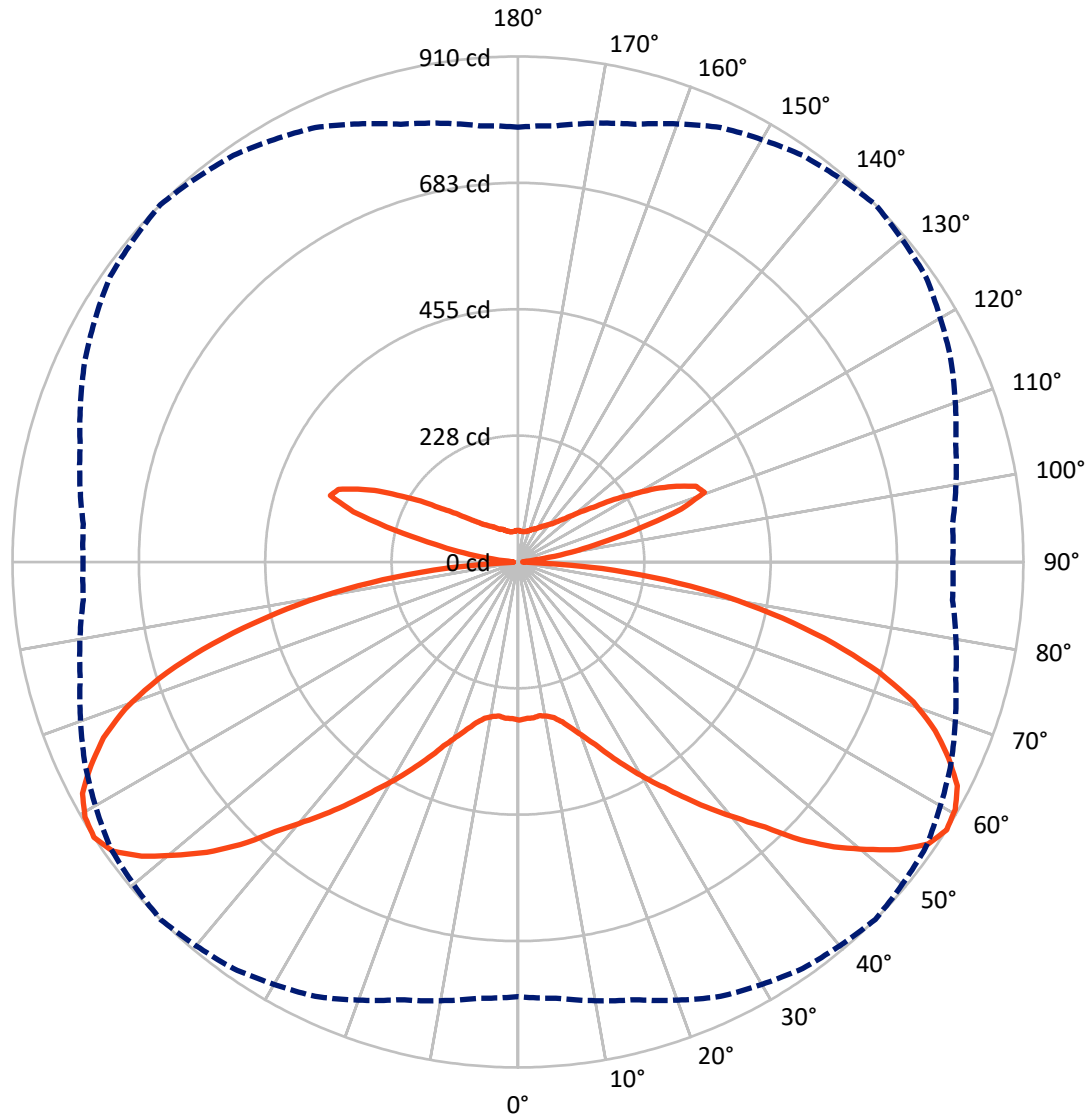
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 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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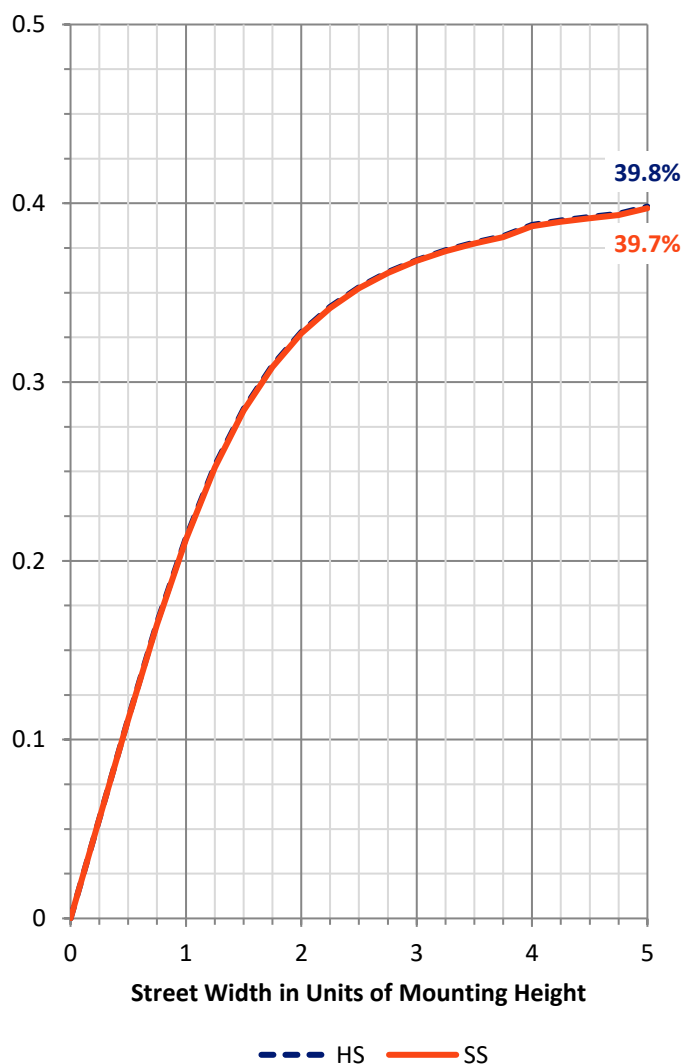
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1681.1	405.8	2086.8
	% Fixture	40.3	9.7	50.0
<b>Street Side</b>	Lumens	1681.1	405.8	2086.8
	% Fixture	40.3	9.7	50.0
<b>Total</b>	Lumens	3362.1	811.5	4173.6
	% Fixture	80.6	19.4	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.8	0.6
10°-20°	85.5	2.0
20°-30°	179.3	4.3
30°-40°	325.3	7.8
40°-50°	530.3	12.7
50°-60°	742.2	17.8
60°-70°	774.9	18.6
70°-80°	553.6	13.3
80°-90°	144.3	3.5
90°-100°	18.1	0.4
100°-110°	184.1	4.4
110°-120°	269.1	6.4
120°-130°	156.2	3.7
130°-140°	82.7	2.0
140°-150°	49.1	1.2
150°-160°	30.3	0.7
160°-170°	16.5	0.4
170°-180°	5.4	0.1
0°-90°	3362.1	80.6
0°-180°	4173.6	100.0

**Coefficient of Utilization**



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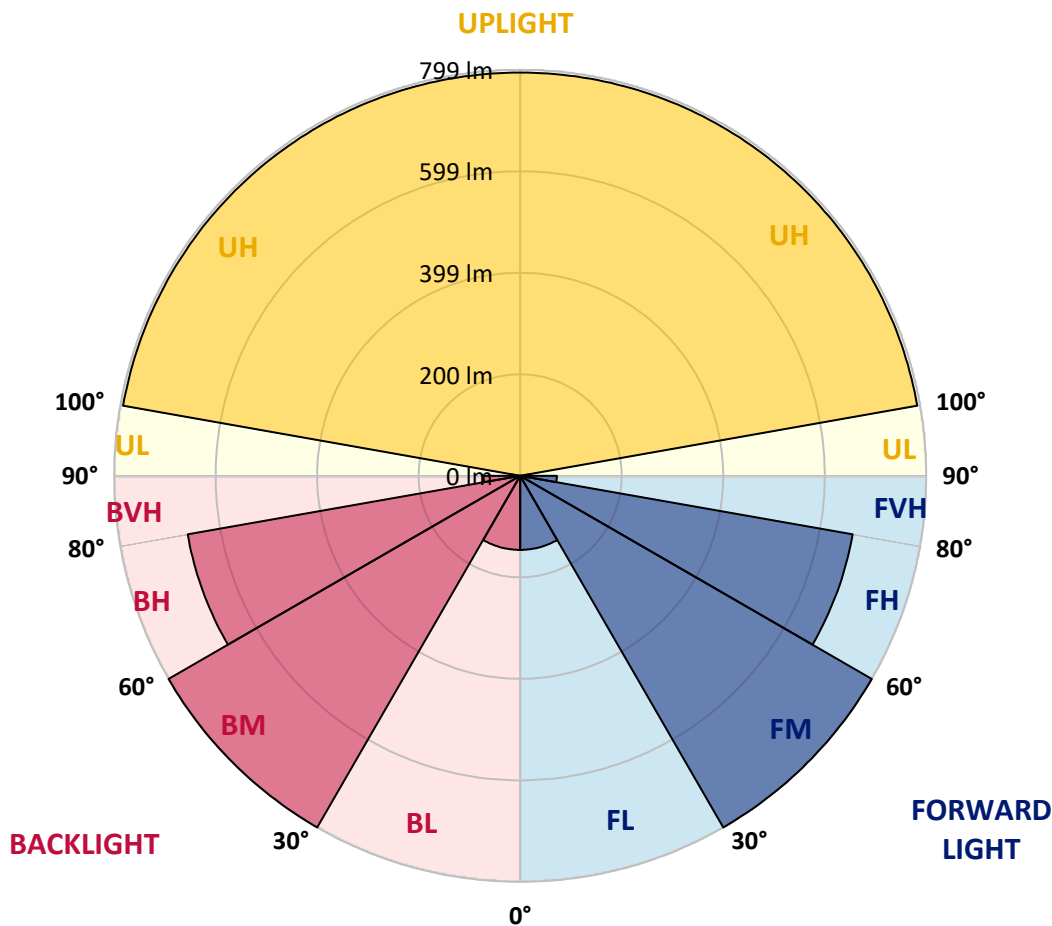
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	145.8	3.5			
FM (30°-60°)	798.9	19.1			
FH (60°-80°)	664.2	15.9			G1/1800
FVH (80°-90°)	72.2	1.7			G1/100
BL (0°-30°)	145.8	3.5	B1/500		
BM (30°-60°)	798.9	19.1	B1/1000		
BH (60°-80°)	664.2	15.9	B2/1000		G1/1800
BVH (80°-90°)	72.2	1.7			G1/100
UL (90°-100°)	18.1	0.4		U2/50	
UH (100°-180°)	793.4	19.0		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°	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9
2.5°	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1
5°	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1	282.1
7.5°	276.6	276.6	279.4	279.4	279.4	279.4	279.4	279.4	279.4	279.4	279.4
10°	276.6	276.6	279.4	279.4	282.1	282.1	282.1	279.4	279.4	276.6	276.6
12.5°	282.1	282.1	282.1	284.9	287.7	287.7	287.7	284.9	284.9	282.1	282.1
15°	290.4	293.2	293.2	296.0	298.7	298.7	298.7	296.0	296.0	293.2	293.2
17.5°	307.0	307.0	307.0	309.8	312.6	315.3	315.3	309.8	309.8	307.0	309.8
20°	323.6	326.4	326.4	329.1	331.9	334.7	331.9	329.1	326.4	326.4	326.4
22.5°	348.5	348.5	351.3	351.3	356.8	356.8	356.8	351.3	351.3	351.3	351.3
25°	376.2	376.2	378.9	381.7	387.2	387.2	384.5	378.9	378.9	378.9	381.7
27.5°	409.4	409.4	412.1	412.1	417.7	417.7	414.9	412.1	412.1	412.1	414.9
30°	439.8	439.8	445.3	448.1	450.8	450.8	450.8	445.3	445.3	442.5	442.5
32.5°	467.4	470.2	473.0	481.3	486.8	484.0	486.8	481.3	475.7	473.0	473.0
35°	497.9	500.6	506.2	514.5	522.8	522.8	522.8	514.5	508.9	503.4	506.2
37.5°	533.8	533.8	542.1	550.4	561.5	564.2	561.5	553.2	544.9	539.4	539.4
40°	572.5	572.5	580.8	589.1	603.0	605.7	603.0	591.9	580.8	578.1	578.1
42.5°	611.3	611.3	622.3	630.6	647.2	652.8	647.2	633.4	622.3	614.0	616.8
45°	652.8	655.5	669.4	686.0	705.3	713.6	705.3	688.7	672.1	655.5	655.5
47.5°	699.8	699.8	716.4	735.7	757.9	766.2	755.1	738.5	716.4	702.5	702.5
50°	730.2	733.0	755.1	780.0	807.7	813.2	804.9	780.0	755.1	735.7	733.0
52.5°	760.6	763.4	788.3	824.2	851.9	860.2	849.1	824.2	788.3	763.4	763.4
55°	780.0	785.5	813.2	851.9	882.3	896.2	879.6	851.9	810.4	782.8	780.0
57.5°	782.8	788.3	815.9	863.0	893.4	910.0	896.2	860.2	815.9	785.5	782.8
60°	777.2	780.0	807.7	857.4	893.4	904.5	893.4	854.7	804.9	780.0	774.5
62.5°	763.4	768.9	796.6	838.1	879.6	887.9	876.8	835.3	793.8	763.4	757.9
65°	719.1	724.7	766.2	807.7	843.6	851.9	843.6	807.7	763.4	719.1	713.6
67.5°	669.4	672.1	713.6	763.4	796.6	810.4	796.6	766.2	710.8	669.4	663.8
70°	616.8	619.6	652.8	705.3	738.5	755.1	741.3	708.1	650.0	614.0	611.3
72.5°	556.0	556.0	589.1	630.6	663.8	680.4	669.4	627.9	583.6	547.7	542.1
75°	473.0	475.7	511.7	542.1	578.1	589.1	578.1	544.9	503.4	467.4	461.9
77.5°	387.2	390.0	420.4	445.3	478.5	486.8	478.5	450.8	412.1	381.7	378.9
80°	293.2	296.0	320.8	343.0	370.6	381.7	373.4	345.7	315.3	287.7	279.4
82.5°	190.8	193.6	218.5	235.1	260.0	268.3	262.8	237.9	213.0	185.3	182.6
85°	85.7	88.5	110.6	124.5	143.8	152.1	146.6	124.5	105.1	80.2	74.7
87.5°	8.3	8.3	8.3	8.3	8.3	11.1	11.1	8.3	8.3	8.3	8.3
90°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9
92.5°	6.9	6.9	6.9	9.7	11.1	9.7	11.1	8.3	8.3	6.9	6.9
95°	8.3	8.3	9.7	12.5	15.3	16.7	16.7	9.7	9.7	8.3	8.3
97.5°	11.1	12.5	12.5	15.3	25.0	45.8	27.8	13.9	13.9	12.5	11.1
100°	18.0	19.4	19.4	34.7	73.6	98.6	70.8	36.1	26.4	19.4	19.4
102.5°	58.3	61.1	75.0	112.5	166.6	151.3	127.7	120.8	83.3	66.6	63.9
105°	148.6	147.2	158.3	187.4	233.3	229.1	211.0	191.6	165.2	152.7	152.7
107.5°	195.8	195.8	205.5	230.5	265.2	309.6	313.8	248.5	218.0	204.1	202.7
110°	220.8	220.8	229.1	249.9	295.7	358.2	355.4	306.8	269.4	251.3	248.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	226.3	227.7	238.8	270.7	320.7	348.5	336.0	316.6	299.9	286.0	283.2
115°	234.6	234.6	247.1	277.7	305.5	316.6	302.7	287.4	276.3	270.7	273.5
117.5°	231.9	236.0	238.8	255.5	273.5	281.8	274.9	254.1	245.8	243.0	238.8
120°	215.2	215.2	218.0	226.3	236.0	240.2	237.4	223.5	216.6	215.2	212.4
122.5°	191.6	193.0	191.6	195.8	202.7	206.9	204.1	193.0	190.2	190.2	187.4
125°	168.0	168.0	166.6	169.4	173.6	172.2	173.6	168.0	166.6	166.6	165.2
127.5°	151.3	149.9	147.2	148.6	149.9	149.9	151.3	145.8	147.2	148.6	147.2
130°	134.7	134.7	131.9	131.9	131.9	129.1	131.9	129.1	130.5	131.9	133.3
132.5°	119.4	119.4	115.2	113.9	113.9	113.9	115.2	113.9	116.6	119.4	119.4
135°	106.9	106.9	102.7	104.1	104.1	102.7	104.1	102.7	105.5	106.9	106.9
137.5°	97.2	97.2	94.4	94.4	94.4	93.0	94.4	94.4	95.8	98.6	100.0
140°	88.9	88.9	87.5	87.5	86.1	87.5	87.5	87.5	88.9	90.2	90.2
142.5°	84.7	83.3	81.9	80.5	81.9	81.9	81.9	80.5	81.9	84.7	84.7
145°	77.8	77.8	76.4	76.4	76.4	77.8	76.4	76.4	77.8	77.8	79.1
147.5°	73.6	73.6	72.2	73.6	73.6	73.6	73.6	72.2	73.6	73.6	75.0
150°	72.2	70.8	69.4	70.8	70.8	69.4	69.4	69.4	69.4	70.8	70.8
152.5°	68.0	68.0	66.6	68.0	66.6	66.6	66.6	66.6	66.6	68.0	69.4
155°	65.3	65.3	63.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
157.5°	62.5	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9	63.9
160°	61.1	61.1	61.1	61.1	59.7	59.7	59.7	61.1	61.1	61.1	62.5
162.5°	59.7	59.7	59.7	59.7	58.3	58.3	58.3	58.3	59.7	59.7	61.1
165°	59.7	58.3	58.3	58.3	56.9	56.9	56.9	56.9	58.3	59.7	58.3
167.5°	56.9	56.9	56.9	56.9	56.9	55.5	55.5	56.9	56.9	56.9	58.3
170°	56.9	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.9
172.5°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	55.5	55.5	56.9	56.9
175°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	56.9	56.9	56.9	55.5
177.5°	56.9	56.9	56.9	56.9	55.5	56.9	56.9	56.9	56.9	56.9	56.9
180°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9

(END OF REPORT)