

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: P833210

Luminaire Tested: **TTN-D1-740-U-RW-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833210  
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-RW-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

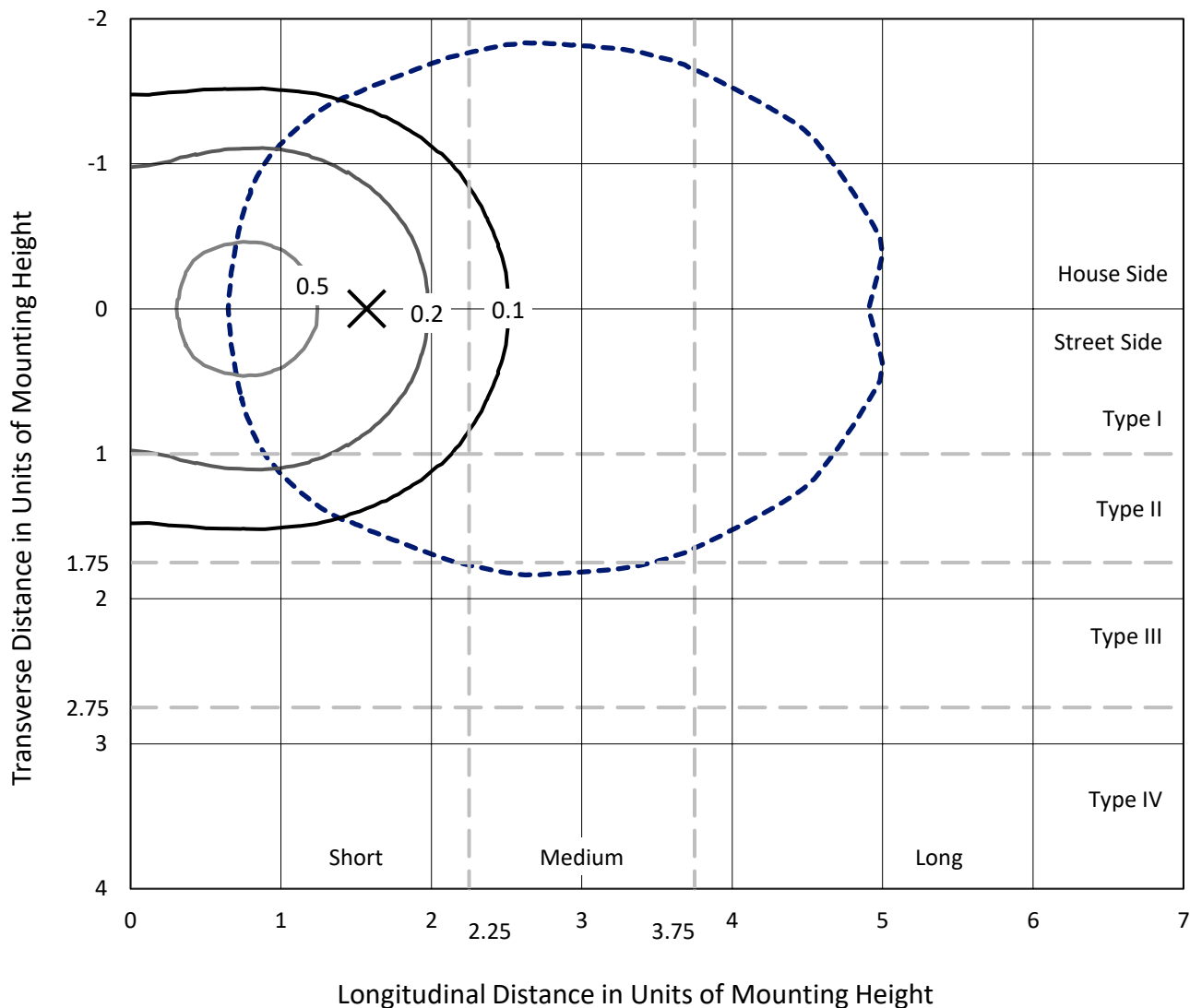
Lumens per Lamp: N/A  
Luminaire Lumens: 3863.7 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type II - Short  
BUG Rating: B2 - U4 - G2  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

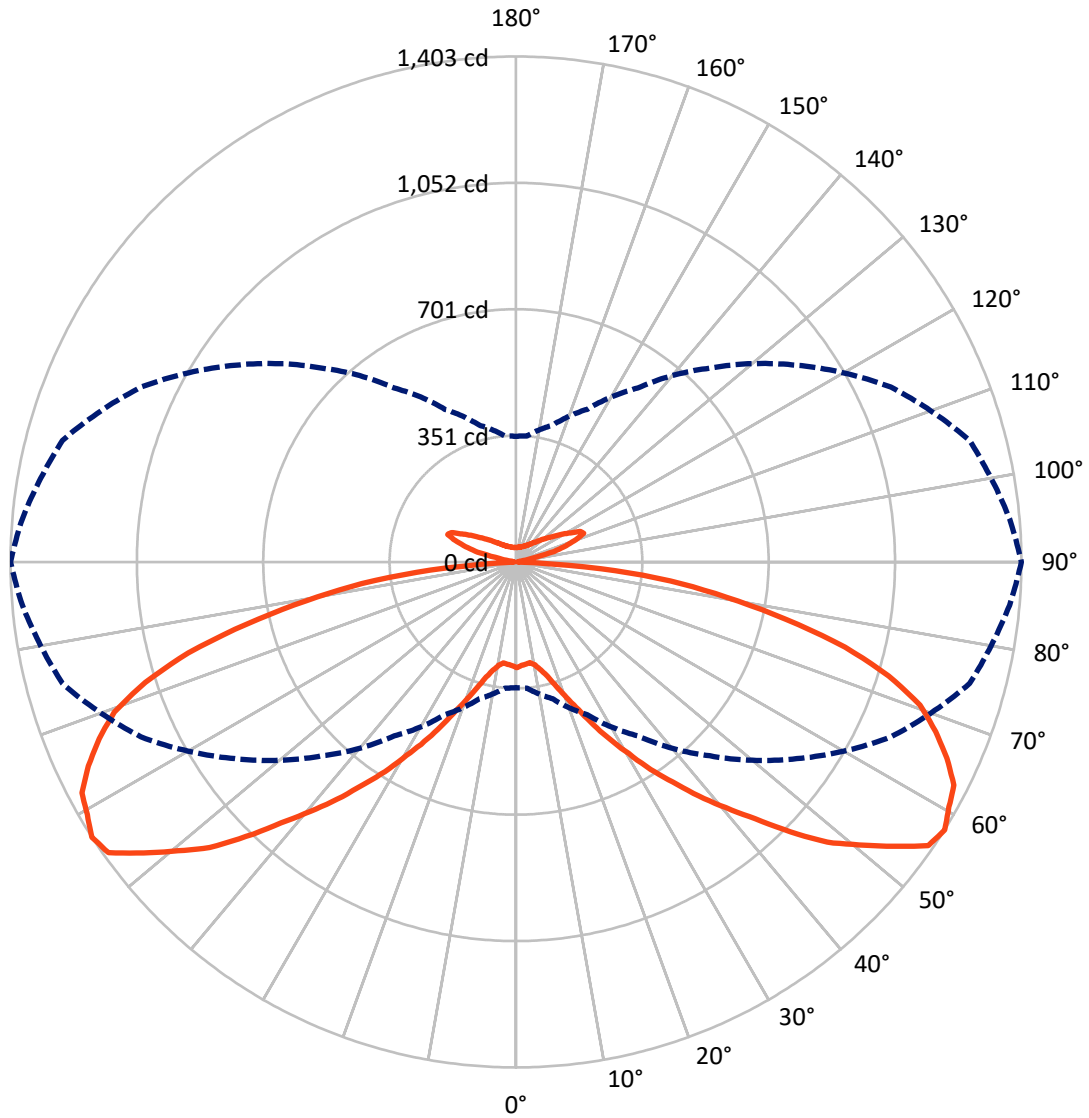
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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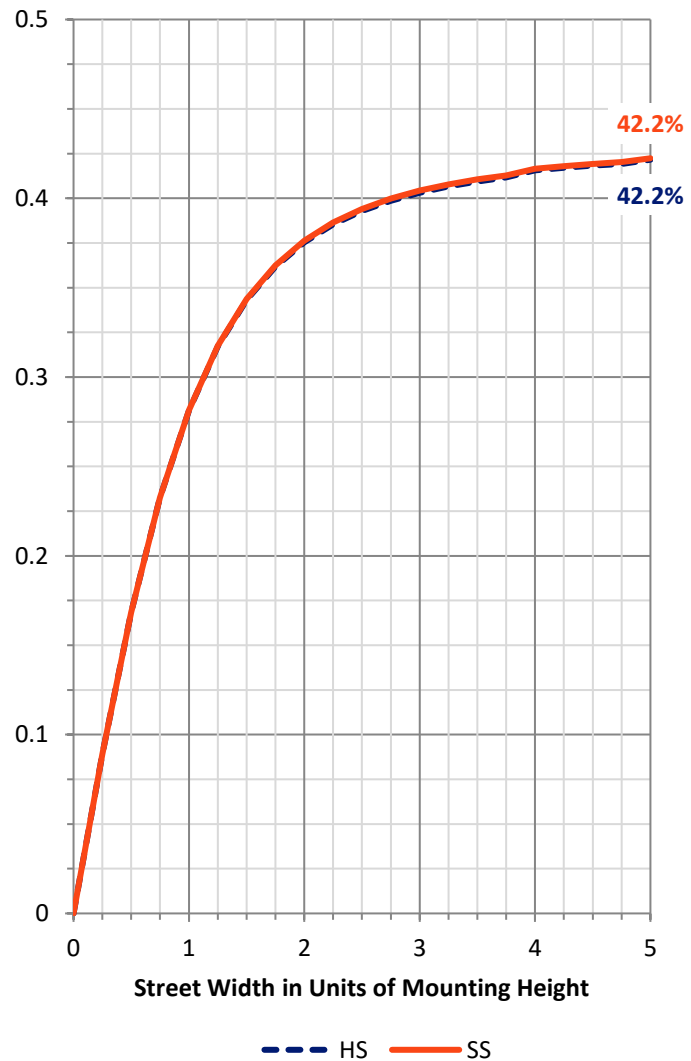
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1639.4	292.5	1931.8
	% Fixture	42.4	7.6	50.0
<b>Street Side</b>	Lumens	1639.4	292.5	1931.8
	% Fixture	42.4	7.6	50.0
<b>Total</b>	Lumens	3278.8	584.9	3863.7
	% Fixture	84.9	15.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	0.7
10°-20°	87.9	2.3
20°-30°	183.4	4.7
30°-40°	328.9	8.5
40°-50°	525.6	13.6
50°-60°	719.5	18.6
60°-70°	742.2	19.2
70°-80°	527.8	13.7
80°-90°	135.9	3.5
90°-100°	13.1	0.3
100°-110°	132.7	3.4
110°-120°	194.0	5.0
120°-130°	112.6	2.9
130°-140°	59.7	1.5
140°-150°	35.4	0.9
150°-160°	21.8	0.6
160°-170°	11.9	0.3
170°-180°	3.9	0.1
0°-90°	3278.8	84.9
0°-180°	3863.7	100.0

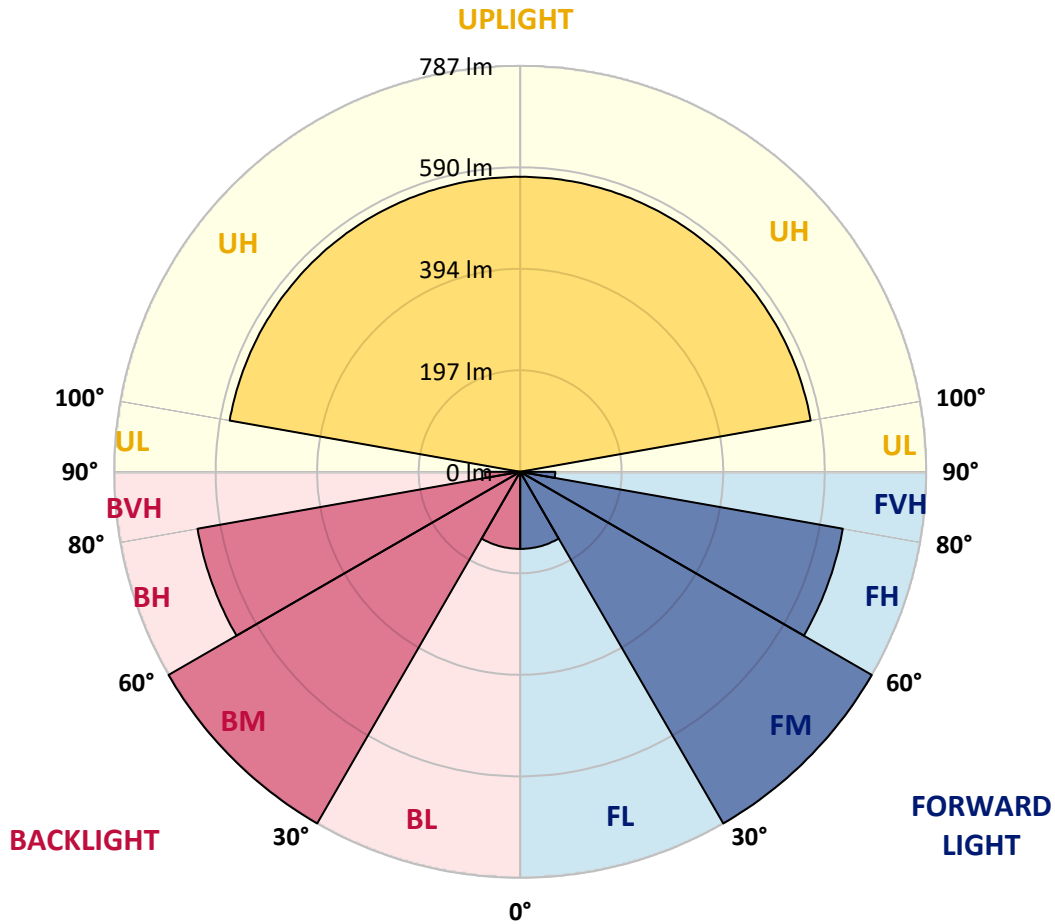


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	149.4	3.9			
FM (30°-60°)	787.0	20.4			
FH (60°-80°)	635.0	16.4			G0/660
FVH (80°-90°)	67.9	1.8			G1/100
BL (0°-30°)	149.4	3.9	B1/500		
BM (30°-60°)	787.0	20.4	B1/1000		
BH (60°-80°)	635.0	16.4	B2/1000		G2/1000
BVH (80°-90°)	67.9	1.8			G1/100
UL (90°-100°)	13.1	0.3		U2/50	
UH (100°-180°)	571.8	14.8		U4/1000	

**BUG Rating: B2-U4-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	293.2	293.2	293.2	293.2	293.2	293.2	293.2	293.2	293.2	293.2	293.2
2.5°	293.2	293.2	290.5	290.5	290.5	287.7	287.7	287.7	287.7	284.9	287.7
5°	293.2	293.2	293.2	293.2	290.5	287.7	287.7	287.7	284.9	284.9	284.9
7.5°	290.5	290.5	290.5	290.5	287.7	284.9	284.9	284.9	282.2	282.2	282.2
10°	287.7	290.5	287.7	287.7	284.9	284.9	287.7	287.7	290.5	290.5	290.5
12.5°	284.9	284.9	284.9	287.7	287.7	290.5	296.0	301.5	304.3	307.1	307.1
15°	284.9	284.9	287.7	290.5	296.0	301.5	309.8	318.1	323.7	329.2	329.2
17.5°	284.9	284.9	287.7	296.0	304.3	315.4	329.2	340.3	351.3	359.6	362.4
20°	284.9	284.9	290.5	301.5	318.1	334.7	354.1	370.7	387.3	401.1	401.1
22.5°	287.7	290.5	296.0	309.8	334.7	359.6	384.5	409.4	428.8	445.4	445.4
25°	293.2	293.2	301.5	323.7	354.1	387.3	423.2	453.7	478.6	500.7	500.7
27.5°	296.0	298.8	309.8	337.5	376.2	417.7	467.5	503.5	536.7	556.0	558.8
30°	301.5	304.3	320.9	348.6	395.6	448.1	506.2	556.0	592.0	611.4	616.9
32.5°	304.3	307.1	329.2	362.4	414.9	475.8	542.2	605.8	655.6	677.7	686.0
35°	312.6	315.4	337.5	376.2	437.1	506.2	583.7	658.4	716.5	744.1	749.7
37.5°	320.9	323.7	345.8	390.1	459.2	539.4	628.0	713.7	780.1	813.3	824.4
40°	326.4	329.2	354.1	406.6	484.1	575.4	677.7	771.8	846.5	888.0	896.3
42.5°	334.7	337.5	365.2	420.5	506.2	611.4	730.3	835.4	915.7	962.7	973.7
45°	343.0	345.8	376.2	437.1	531.1	650.1	782.9	910.1	1001.4	1056.7	1067.8
47.5°	351.3	354.1	387.3	453.7	556.0	688.8	838.2	976.5	1087.2	1139.7	1161.9
50°	354.1	359.6	392.8	464.7	572.6	722.0	885.2	1042.9	1159.1	1228.2	1233.8
52.5°	356.9	362.4	398.4	473.0	586.5	746.9	924.0	1098.2	1233.8	1316.8	1311.2
55°	359.6	359.6	398.4	473.0	592.0	763.5	951.6	1134.2	1283.6	1350.0	1388.7
57.5°	348.6	351.3	392.8	467.5	589.2	760.7	951.6	1148.0	1302.9	1374.9	1402.5
60°	334.7	340.3	379.0	453.7	578.2	752.4	946.1	1142.5	1311.2	1388.7	1380.4
62.5°	315.4	326.4	359.6	434.3	561.6	733.1	937.8	1128.7	1291.9	1372.1	1363.8
65°	293.2	304.3	334.7	414.9	525.6	686.0	893.5	1101.0	1239.3	1330.6	1314.0
67.5°	271.1	279.4	309.8	381.8	484.1	636.3	835.4	1040.1	1164.6	1264.2	1255.9
70°	246.2	249.0	279.4	343.0	442.6	586.5	780.1	954.4	1098.2	1172.9	1189.5
72.5°	215.8	215.8	246.2	301.5	392.8	520.1	705.4	857.6	993.1	1056.7	1081.6
75°	177.0	179.8	204.7	254.5	329.2	445.4	600.3	755.2	868.6	935.0	943.3
77.5°	138.3	141.1	160.4	201.9	265.6	359.6	495.2	616.9	724.8	782.9	766.3
80°	99.6	102.4	116.2	146.6	196.4	268.3	381.8	489.6	567.1	614.1	592.0
82.5°	60.9	63.6	71.9	91.3	124.5	174.3	260.0	340.3	401.1	439.8	431.5
85°	30.4	30.4	36.0	41.5	52.6	77.5	124.5	171.5	218.5	246.2	237.9
87.5°	5.5	8.3	8.3	8.3	8.3	5.5	8.3	8.3	8.3	13.8	5.5
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
92.5°	5.0	5.0	5.0	7.0	8.0	7.0	8.0	6.0	6.0	5.0	5.0
95°	6.0	6.0	7.0	9.0	11.0	12.0	12.0	7.0	7.0	6.0	6.0
97.5°	8.0	9.0	9.0	11.0	18.0	33.0	20.0	10.0	10.0	9.0	8.0
100°	13.0	14.0	14.0	25.0	53.0	71.1	51.0	26.0	19.0	14.0	14.0
102.5°	42.0	44.0	54.0	81.1	120.1	109.1	92.1	87.1	60.0	48.0	46.0
105°	107.1	106.1	114.1	135.1	168.1	165.1	152.1	138.1	119.1	110.1	110.1
107.5°	141.1	141.1	148.1	166.1	191.1	223.2	226.2	179.1	157.1	147.1	146.1
110°	159.1	159.1	165.1	180.1	213.2	258.2	256.2	221.2	194.1	181.1	179.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	163.1	164.1	172.1	195.1	231.2	251.2	242.2	228.2	216.2	206.2	204.2
115°	169.1	169.1	178.1	200.2	220.2	228.2	218.2	207.2	199.2	195.1	197.1
117.5°	167.1	170.1	172.1	184.1	197.1	203.2	198.1	183.1	177.1	175.1	172.1
120°	155.1	155.1	157.1	163.1	170.1	173.1	171.1	161.1	156.1	155.1	153.1
122.5°	138.1	139.1	138.1	141.1	146.1	149.1	147.1	139.1	137.1	137.1	135.1
125°	121.1	121.1	120.1	122.1	125.1	124.1	125.1	121.1	120.1	120.1	119.1
127.5°	109.1	108.1	106.1	107.1	108.1	108.1	109.1	105.1	106.1	107.1	106.1
130°	97.1	97.1	95.1	95.1	95.1	93.1	95.1	93.1	94.1	95.1	96.1
132.5°	86.1	86.1	83.1	82.1	82.1	82.1	83.1	82.1	84.1	86.1	86.1
135°	77.1	77.1	74.1	75.1	75.1	74.1	75.1	74.1	76.1	77.1	77.1
137.5°	70.1	70.1	68.1	68.1	68.1	67.1	68.1	68.1	69.1	71.1	72.1
140°	64.0	64.0	63.0	63.0	62.0	63.0	63.0	63.0	64.0	65.0	65.0
142.5°	61.0	60.0	59.0	58.0	59.0	59.0	59.0	58.0	59.0	61.0	61.0
145°	56.0	56.0	55.0	55.0	55.0	56.0	55.0	55.0	56.0	56.0	57.0
147.5°	53.0	53.0	52.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0	54.0
150°	52.0	51.0	50.0	51.0	51.0	50.0	50.0	50.0	50.0	51.0	51.0
152.5°	49.0	49.0	48.0	49.0	48.0	48.0	48.0	48.0	48.0	49.0	50.0
155°	47.0	47.0	46.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
157.5°	45.0	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	46.0
160°	44.0	44.0	44.0	44.0	43.0	43.0	43.0	44.0	44.0	44.0	45.0
162.5°	43.0	43.0	43.0	43.0	42.0	42.0	42.0	42.0	43.0	43.0	44.0
165°	43.0	42.0	42.0	42.0	41.0	41.0	41.0	41.0	42.0	43.0	42.0
167.5°	41.0	41.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	42.0
170°	41.0	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	41.0
172.5°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0
175°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	41.0	41.0	41.0	40.0
177.5°	41.0	41.0	41.0	41.0	40.0	41.0	41.0	41.0	41.0	41.0	41.0
180°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0

(END OF REPORT)