

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: P833231

Luminaire Tested: **TTN-D1-750-U-MQ-CG-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833231  
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-D1-750-U-MQ-CG-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
5000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

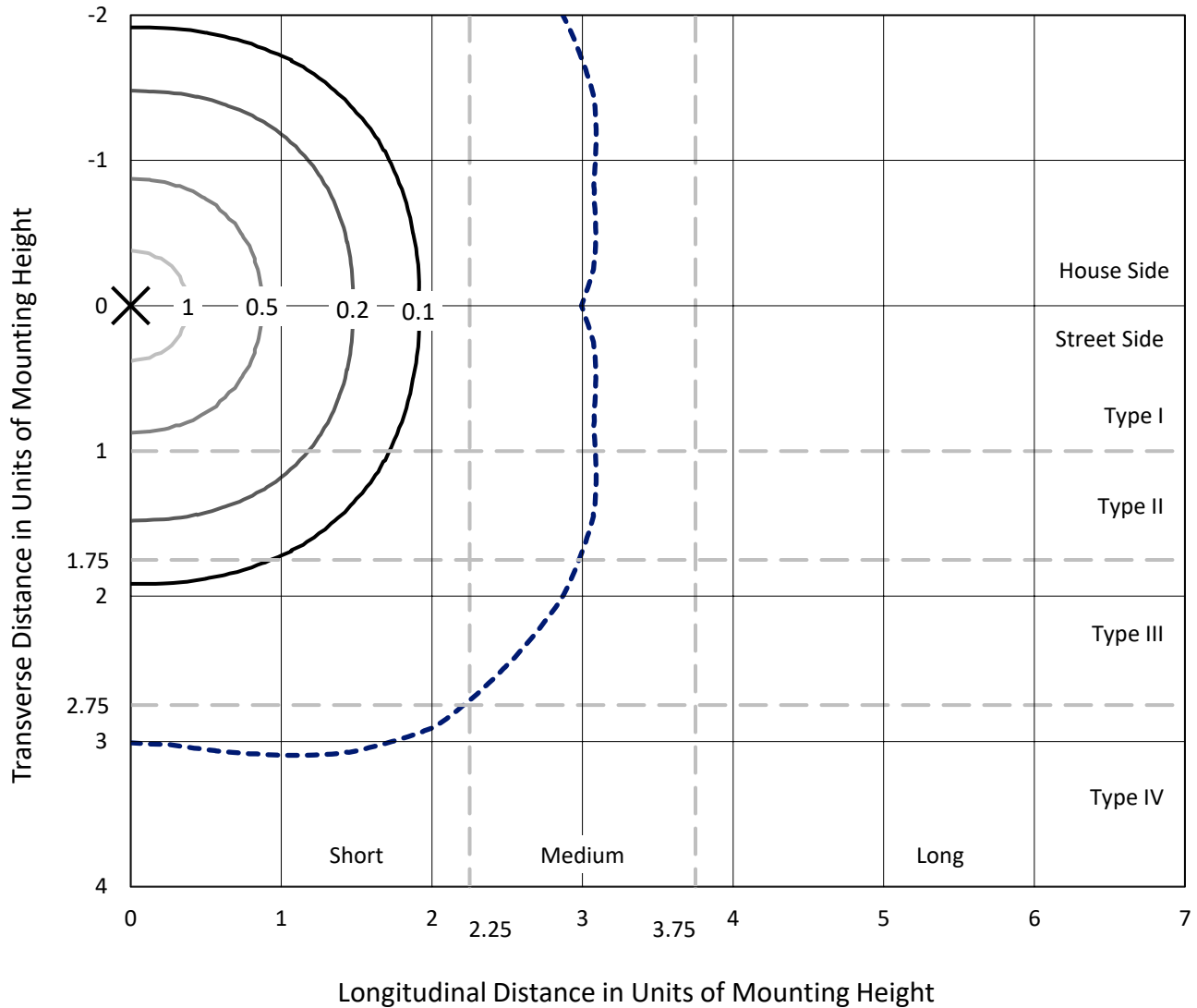
Lumens per Lamp: N/A  
Luminaire Lumens: 3993.7 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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



REPORT NUMBER: P833231  
 CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

### Iso-Footcandle Lines of Horizontal Illumination

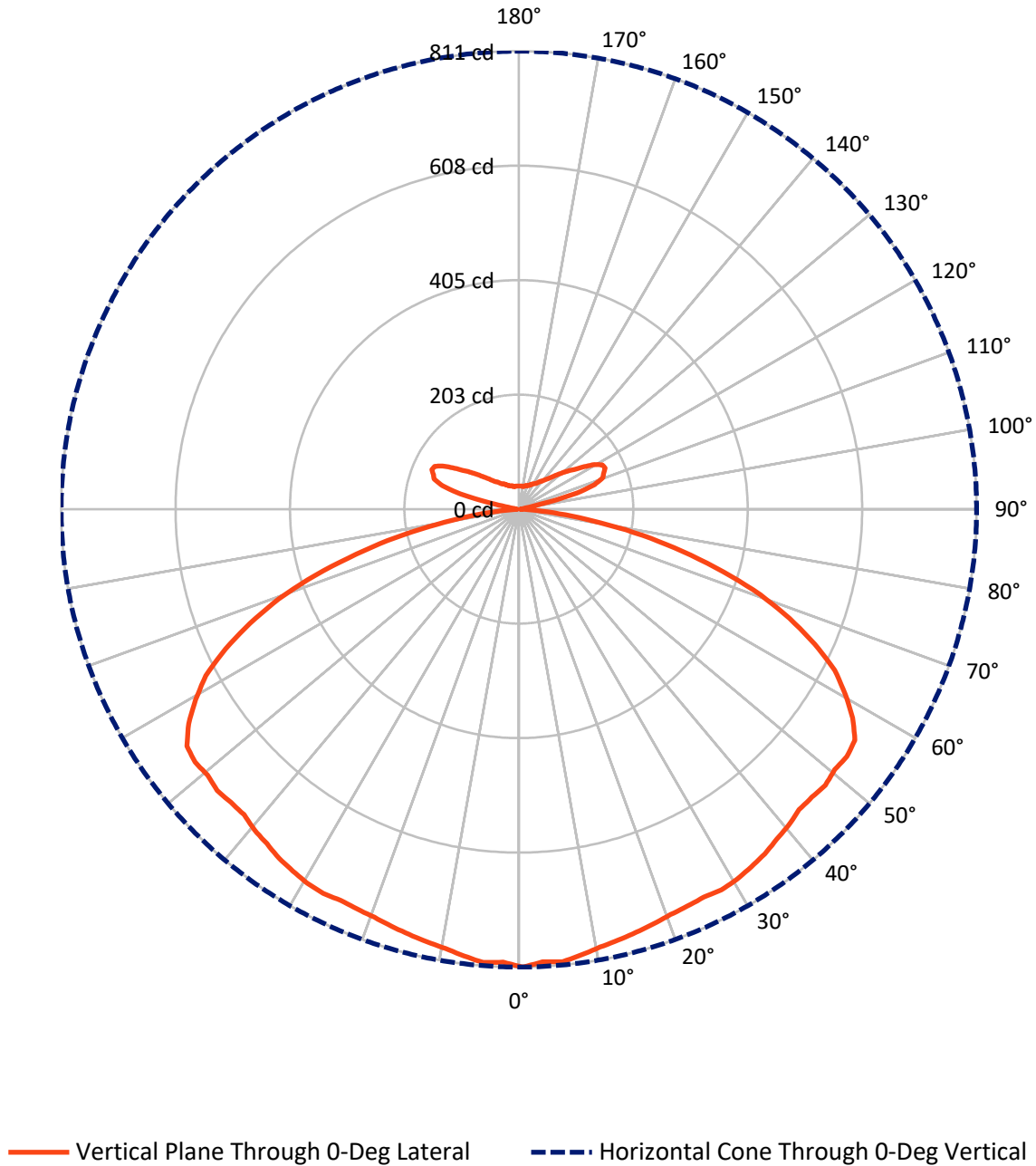
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P833231  
CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

### Luminous Intensity Polar Plot



REPORT NUMBER: P833231  
 CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

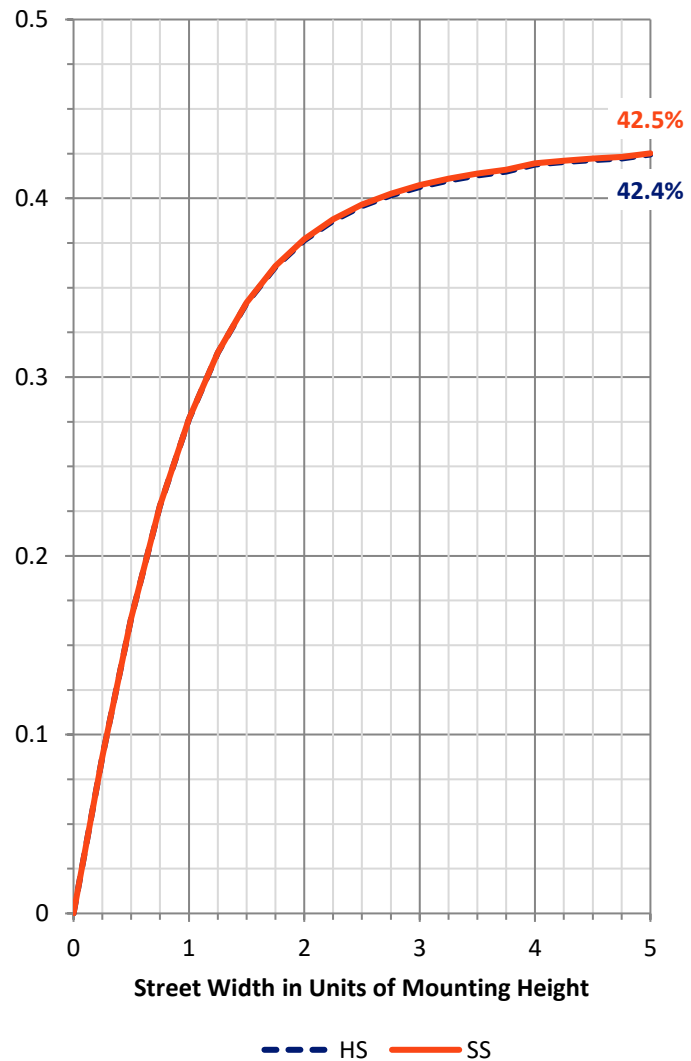
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1704.4	292.5	1996.8
	% Fixture	42.7	7.3	50.0
<b>Street Side</b>	Lumens	1704.4	292.5	1996.8
	% Fixture	42.7	7.3	50.0
<b>Total</b>	Lumens	3408.8	584.9	3993.7
	% Fixture	85.4	14.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	1.9
10°-20°	220.3	5.5
20°-30°	354.3	8.9
30°-40°	473.3	11.9
40°-50°	575.1	14.4
50°-60°	668.2	16.7
60°-70°	616.5	15.4
70°-80°	360.9	9.0
80°-90°	64.0	1.6
90°-100°	13.1	0.3
100°-110°	132.7	3.3
110°-120°	194.0	4.9
120°-130°	112.6	2.8
130°-140°	59.7	1.5
140°-150°	35.4	0.9
150°-160°	21.8	0.5
160°-170°	11.9	0.3
170°-180°	3.9	0.1
0°-90°	3408.8	85.4
0°-180°	3993.7	100.0

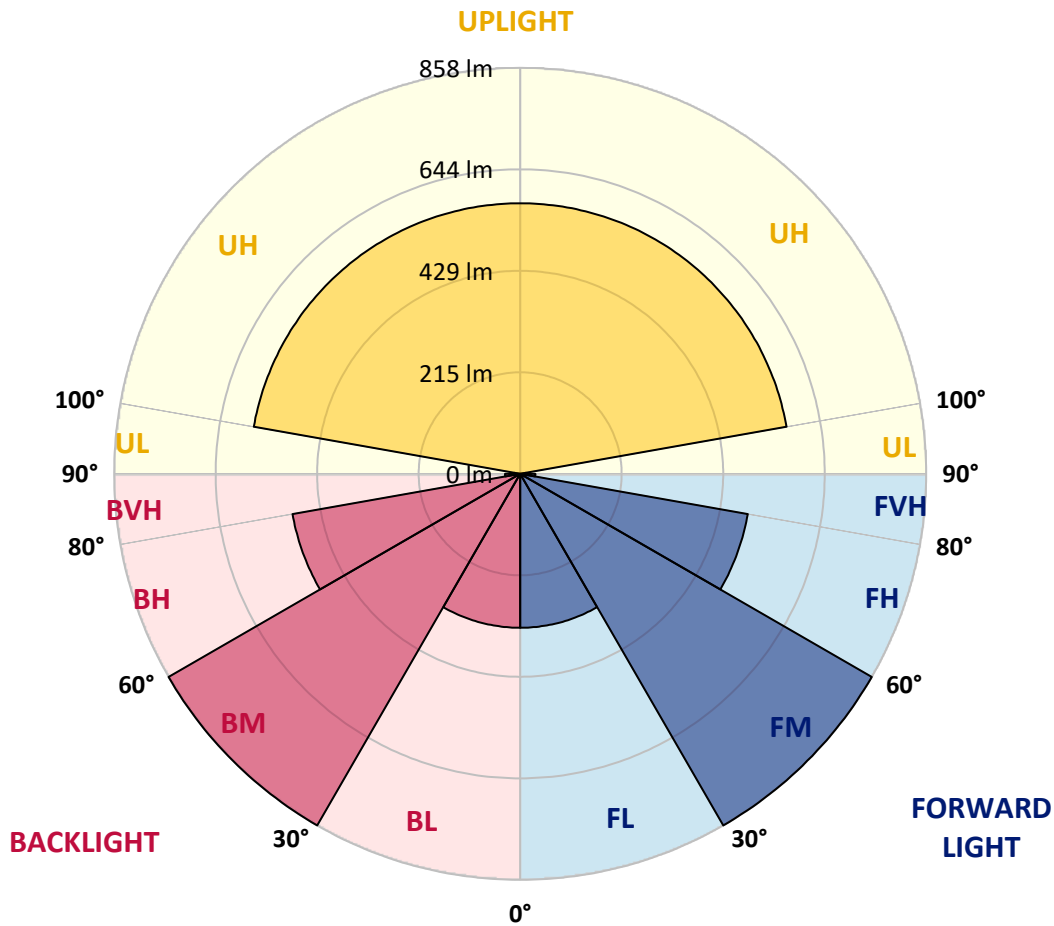


REPORT NUMBER: P833231  
 CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	325.4	8.1			
FM (30°-60°)	858.3	21.5			
FH (60°-80°)	488.7	12.2			G0/660
FVH (80°-90°)	32.0	0.8			G1/100
BL (0°-30°)	325.4	8.1	B1/500		
BM (30°-60°)	858.3	21.5	B1/1000		
BH (60°-80°)	488.7	12.2	B1/500		G0/660
BVH (80°-90°)	32.0	0.8			G1/100
UL (90°-100°)	13.1	0.3		U2/50	
UH (100°-180°)	571.8	14.3		U4/1000	

**BUG Rating: B1-U4-G1**  
 Type V Short





REPORT NUMBER: P833231

CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8	810.8
2.5°	802.5	805.2	802.5	802.5	802.5	802.5	802.5	802.5	802.5	802.5	805.2
5°	805.2	805.2	805.2	805.2	802.5	802.5	802.5	802.5	802.5	805.2	805.2
7.5°	796.9	796.9	796.9	796.9	796.9	794.2	796.9	796.9	796.9	796.9	796.9
10°	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6	788.6
12.5°	783.1	783.1	783.1	783.1	783.1	783.1	783.1	783.1	783.1	780.3	780.3
15°	777.6	777.6	777.6	777.6	780.3	780.3	777.6	777.6	777.6	777.6	777.6
17.5°	772.0	772.0	772.0	772.0	774.8	774.8	774.8	772.0	772.0	772.0	772.0
20°	766.5	766.5	766.5	766.5	769.3	769.3	769.3	769.3	769.3	766.5	766.5
22.5°	763.7	763.7	763.7	763.7	766.5	766.5	766.5	766.5	763.7	763.7	763.7
25°	760.9	763.7	763.7	763.7	766.5	769.3	769.3	766.5	763.7	760.9	760.9
27.5°	763.7	763.7	763.7	766.5	766.5	769.3	769.3	766.5	763.7	763.7	763.7
30°	760.9	760.9	760.9	763.7	766.5	769.3	766.5	766.5	763.7	760.9	760.9
32.5°	755.4	755.4	758.2	760.9	763.7	763.7	763.7	760.9	758.2	755.4	755.4
35°	749.9	749.9	749.9	752.6	758.2	758.2	758.2	755.4	752.6	749.9	747.1
37.5°	741.6	744.3	744.3	749.9	752.6	755.4	752.6	749.9	744.3	741.6	741.6
40°	736.0	736.0	738.8	744.3	749.9	749.9	747.1	744.3	738.8	736.0	736.0
42.5°	727.7	727.7	733.3	738.8	747.1	747.1	744.3	738.8	733.3	727.7	727.7
45°	727.7	727.7	733.3	744.3	749.9	755.4	749.9	744.3	733.3	727.7	725.0
47.5°	730.5	730.5	736.0	749.9	760.9	766.5	758.2	747.1	736.0	730.5	727.7
50°	725.0	727.7	738.8	752.6	766.5	769.3	766.5	749.9	738.8	725.0	725.0
52.5°	727.7	727.7	741.6	763.7	777.6	783.1	777.6	763.7	738.8	725.0	725.0
55°	722.2	719.4	738.8	763.7	785.9	796.9	785.9	763.7	736.0	719.4	716.7
57.5°	697.3	697.3	722.2	747.1	774.8	780.3	772.0	747.1	719.4	697.3	691.8
60°	664.1	666.9	691.8	719.4	744.3	747.1	741.6	719.4	691.8	666.9	658.6
62.5°	628.1	633.7	658.6	686.2	716.7	722.2	713.9	686.2	653.0	636.4	622.6
65°	575.6	583.9	611.5	642.0	675.2	672.4	672.4	639.2	614.3	586.6	572.8
67.5°	517.4	525.7	545.1	586.6	614.3	611.5	608.8	586.6	545.1	525.7	517.4
70°	453.8	459.3	478.7	520.2	545.1	547.9	539.6	517.4	478.7	464.9	451.0
72.5°	379.1	381.9	409.5	442.7	467.6	464.9	462.1	442.7	406.8	392.9	376.3
75°	298.8	301.6	326.5	357.0	376.3	373.6	370.8	357.0	326.5	309.9	296.1
77.5°	224.1	221.4	246.3	268.4	279.5	282.2	276.7	265.6	243.5	229.7	221.4
80°	146.7	143.9	166.0	182.6	190.9	190.9	188.2	179.9	163.3	152.2	146.7
82.5°	83.0	80.2	94.1	105.1	113.5	110.7	107.9	102.4	94.1	85.8	80.2
85°	30.4	30.4	38.7	44.3	49.8	49.8	47.0	44.3	36.0	33.2	30.4
87.5°	2.8	2.8	5.5	8.3	8.3	8.3	5.5	5.5	2.8	2.8	2.8
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



REPORT NUMBER: P833231

CATALOG NUMBER: TTN-D1-750-U-MQ-CG-UPL2

**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)