

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: P833333

Luminaire Tested: **TTN-D1-830-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833333  
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-D1-830-U-WQ-CG-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

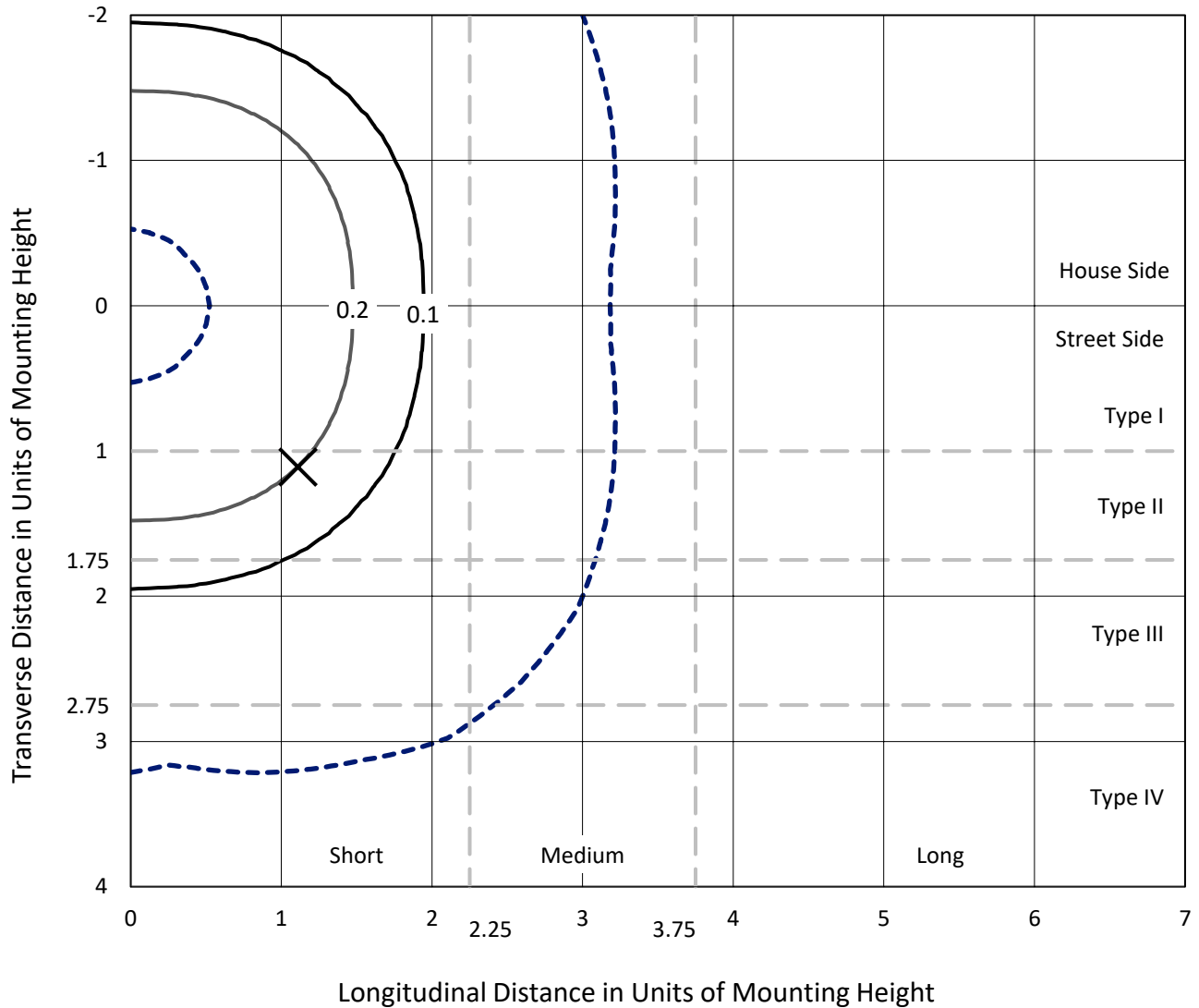
Lumens per Lamp: N/A  
Luminaire Lumens: 3394.8 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

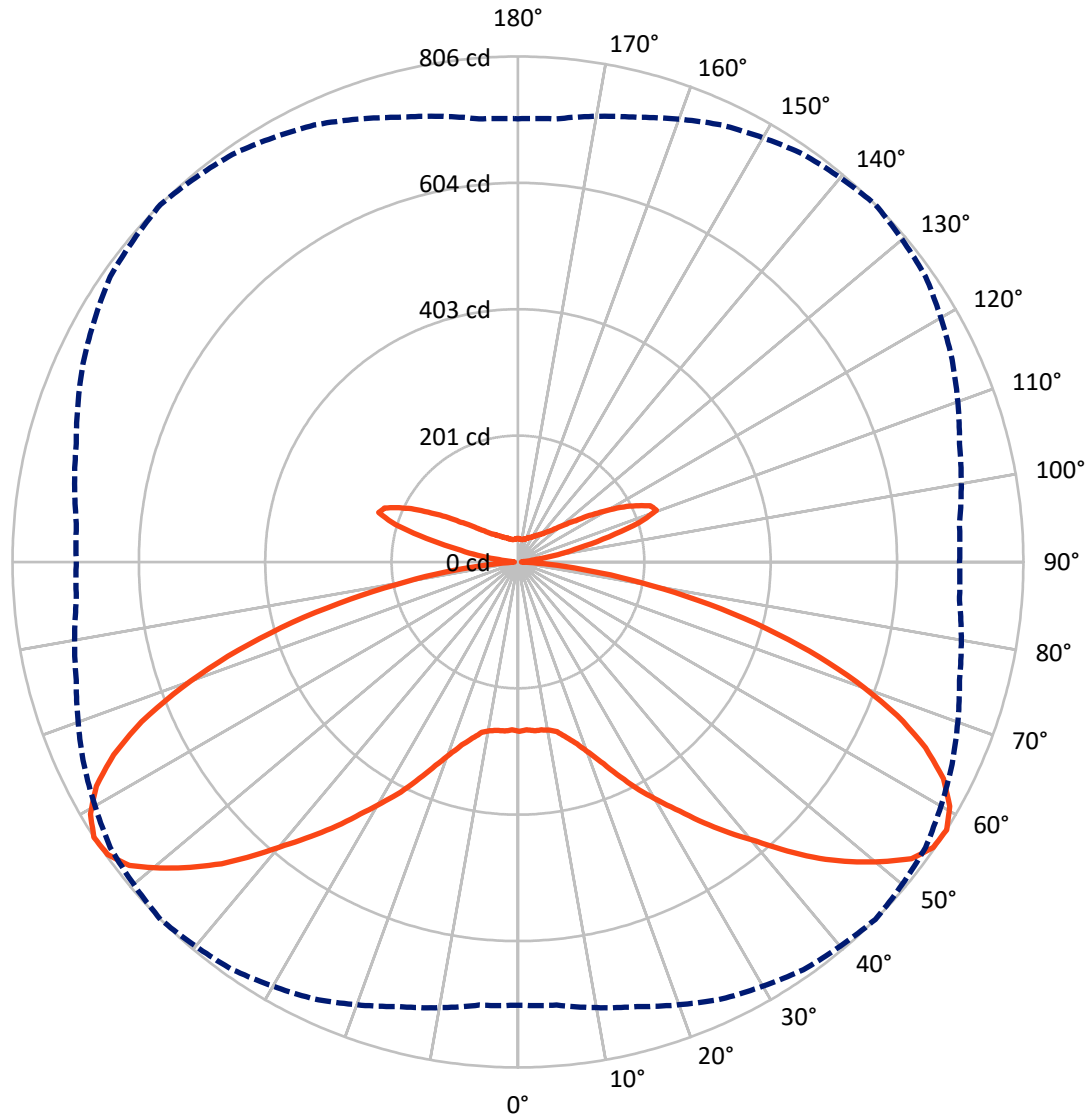
× Max cd  
 - - - 1/2 Max cd



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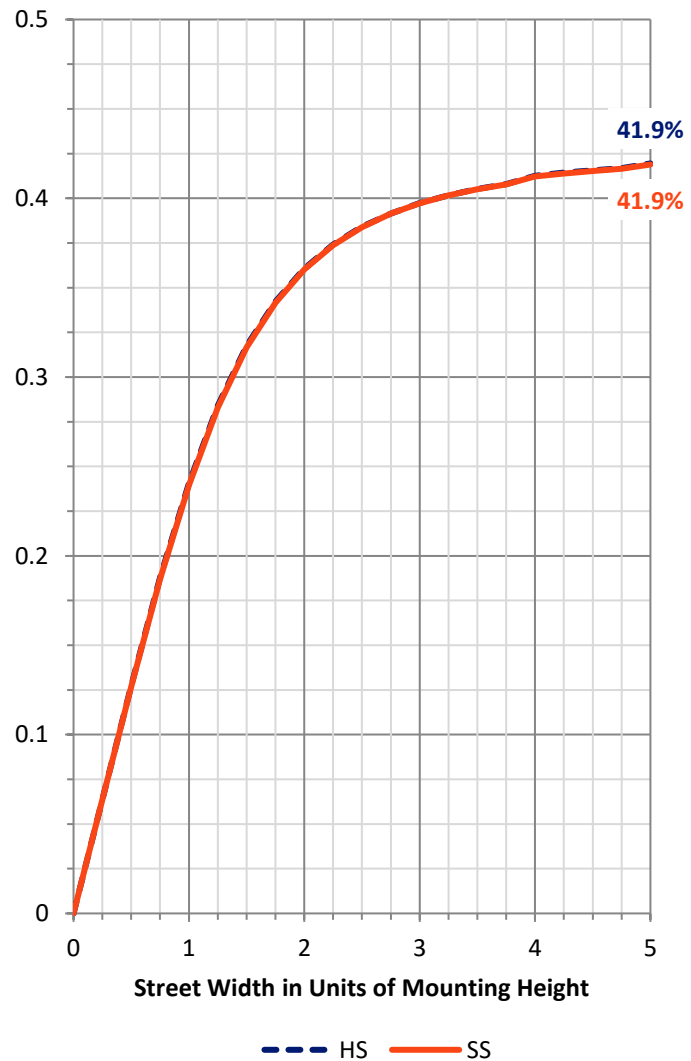
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1430.4	267.0	1697.4
	% Fixture	42.1	7.9	50.0
<b>Street Side</b>	Lumens	1430.4	267.0	1697.4
	% Fixture	42.1	7.9	50.0
<b>Total</b>	Lumens	2860.8	534.0	3394.8
	% Fixture	84.3	15.7	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.8	0.8
10°-20°	83.3	2.5
20°-30°	175.3	5.2
30°-40°	316.0	9.3
40°-50°	502.3	14.8
50°-60°	670.1	19.7
60°-70°	647.5	19.1
70°-80°	375.2	11.1
80°-90°	65.4	1.9
90°-100°	11.9	0.4
100°-110°	121.1	3.6
110°-120°	177.1	5.2
120°-130°	102.8	3.0
130°-140°	54.4	1.6
140°-150°	32.3	1.0
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	2860.8	84.3
0°-180°	3394.8	100.0

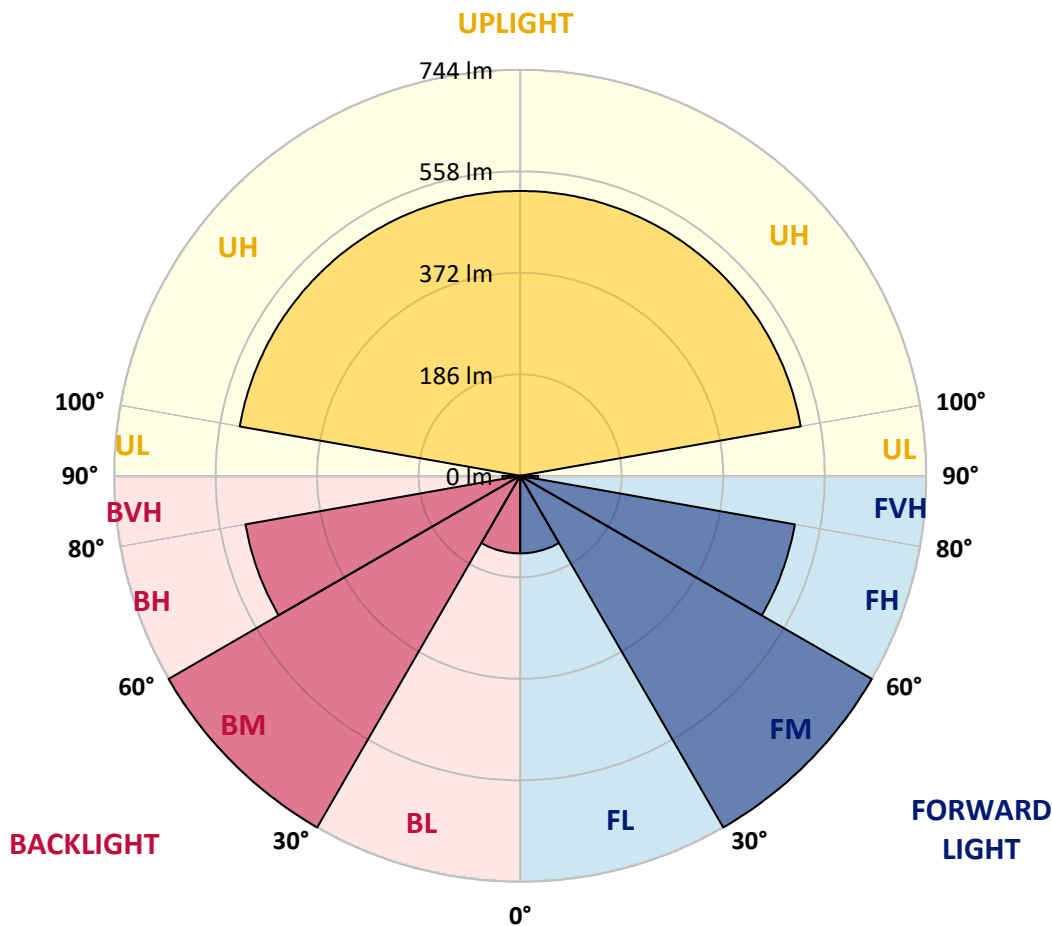


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	142.2	4.2			
FM (30°-60°)	744.2	21.9			
FH (60°-80°)	511.3	15.1			G0/660
FVH (80°-90°)	32.7	1.0			G1/100
BL (0°-30°)	142.2	4.2	B1/500		
BM (30°-60°)	744.2	21.9	B1/1000		
BH (60°-80°)	511.3	15.1	B2/1000		G0/660
BVH (80°-90°)	32.7	1.0			G1/100
UL (90°-100°)	11.9	0.4		U2/50	
UH (100°-180°)	522.1	15.4		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°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2
2.5°	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7
5°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2
7.5°	267.7	267.7	270.2	270.2	270.2	270.2	270.2	270.2	270.2	267.7	267.7
10°	270.2	270.2	270.2	272.7	272.7	272.7	272.7	272.7	270.2	270.2	270.2
12.5°	275.1	275.1	277.6	277.6	277.6	277.6	277.6	277.6	277.6	275.1	275.1
15°	287.5	287.5	287.5	290.0	290.0	290.0	290.0	290.0	287.5	287.5	287.5
17.5°	299.9	299.9	302.4	302.4	304.9	304.9	304.9	302.4	302.4	302.4	302.4
20°	317.3	317.3	319.8	319.8	322.2	324.7	324.7	322.2	319.8	319.8	319.8
22.5°	339.6	342.1	342.1	342.1	344.5	349.5	347.0	344.5	342.1	342.1	342.1
25°	366.8	369.3	371.8	371.8	374.3	379.2	379.2	371.8	371.8	371.8	371.8
27.5°	399.1	401.5	404.0	404.0	406.5	411.5	409.0	404.0	404.0	401.5	401.5
30°	428.8	431.3	433.8	436.2	438.7	441.2	441.2	436.2	433.8	431.3	428.8
32.5°	458.6	458.6	463.5	468.5	473.4	473.4	475.9	468.5	463.5	458.6	456.1
35°	488.3	490.8	493.3	500.7	508.1	510.6	508.1	500.7	493.3	488.3	488.3
37.5°	520.5	523.0	525.5	535.4	542.8	547.8	542.8	535.4	525.5	520.5	518.0
40°	555.2	557.7	560.2	572.6	580.0	585.0	577.5	570.1	560.2	555.2	552.7
42.5°	587.4	592.4	597.4	612.2	624.6	629.6	622.1	609.8	599.8	587.4	585.0
45°	627.1	632.1	639.5	654.4	666.8	674.2	664.3	651.9	637.0	627.1	624.6
47.5°	659.3	664.3	671.7	691.6	708.9	713.9	703.9	689.1	669.2	656.9	654.4
50°	684.1	689.1	703.9	726.3	746.1	751.0	741.1	721.3	699.0	681.6	679.2
52.5°	703.9	708.9	726.3	756.0	778.3	785.7	773.3	751.0	721.3	701.5	699.0
55°	713.9	716.3	738.6	770.9	793.2	803.1	790.7	765.9	733.7	711.4	708.9
57.5°	706.4	708.9	733.7	768.4	793.2	805.6	793.2	763.4	728.7	706.4	703.9
60°	691.6	691.6	713.9	753.5	783.3	790.7	778.3	748.6	711.4	689.1	686.6
62.5°	664.3	661.8	689.1	723.8	753.5	761.0	751.0	721.3	684.1	661.8	659.3
65°	612.2	607.3	646.9	679.2	706.4	713.9	706.4	679.2	644.5	609.8	604.8
67.5°	550.3	542.8	580.0	617.2	642.0	651.9	642.0	619.7	580.0	545.3	542.8
70°	485.8	478.4	508.1	540.4	567.6	572.6	562.7	540.4	503.2	480.9	480.9
72.5°	409.0	401.5	428.8	453.6	480.9	485.8	475.9	456.1	428.8	406.5	404.0
75°	324.7	317.3	342.1	361.9	389.2	391.6	386.7	364.4	342.1	319.8	319.8
77.5°	240.4	233.0	252.8	270.2	292.5	292.5	290.0	272.7	252.8	238.0	238.0
80°	158.6	153.7	171.0	178.5	198.3	198.3	195.8	183.4	168.6	158.6	156.2
82.5°	89.2	84.3	99.1	101.6	116.5	116.5	114.0	104.1	94.2	86.8	86.8
85°	34.7	29.7	39.7	42.1	49.6	49.6	47.1	44.6	37.2	32.2	32.2
87.5°	2.5	2.5	5.0	5.0	7.4	7.4	7.4	5.0	5.0	2.5	2.5
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)