

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: P832964

Luminaire Tested: **TTN-D0-830-U-MQ-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832964  
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-D0-830-U-MQ-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

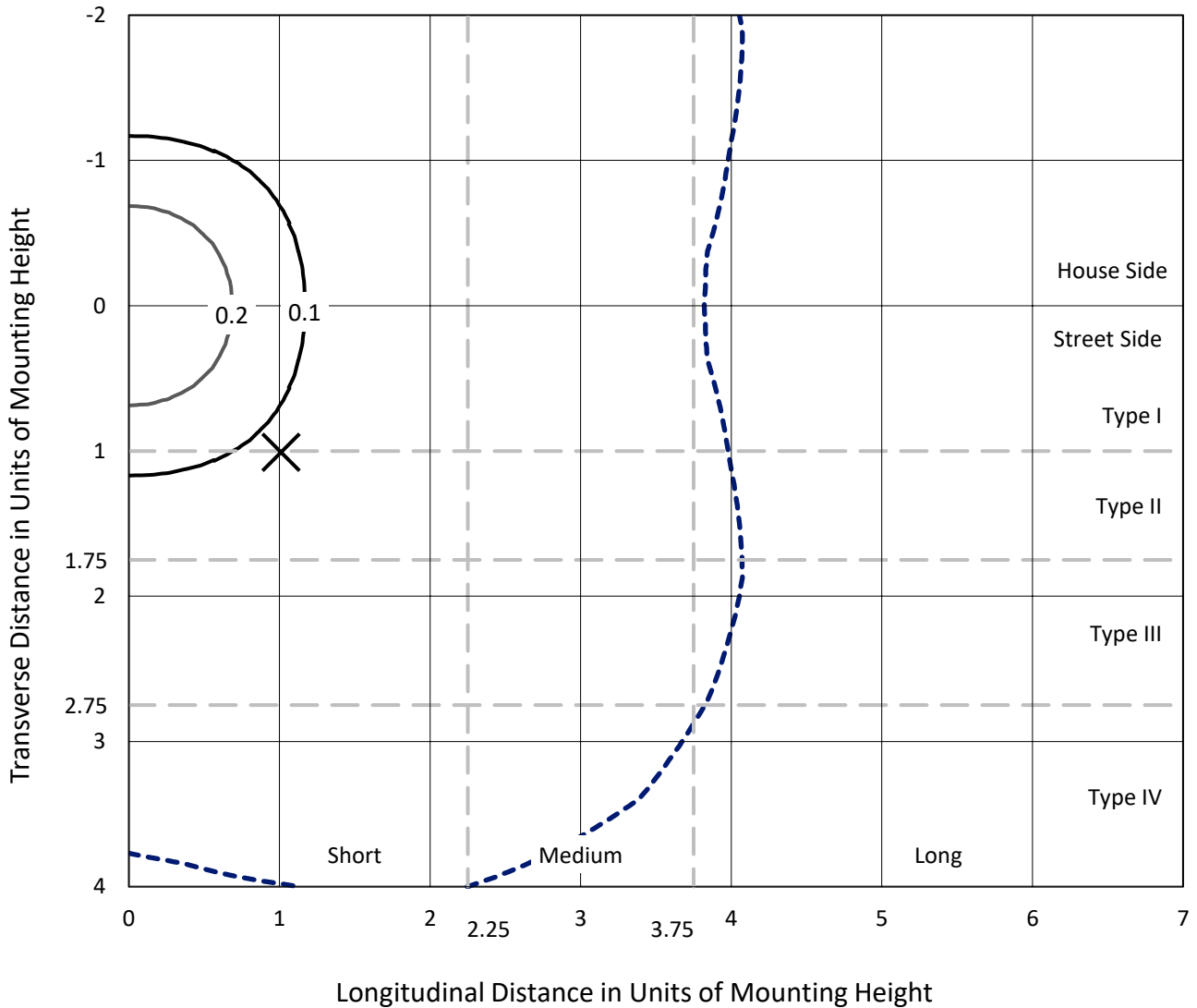
Lumens per Lamp: N/A  
Luminaire Lumens: 1676.7 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 15.2  
Input Voltage (V): NR  
Input Current (Ain): 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

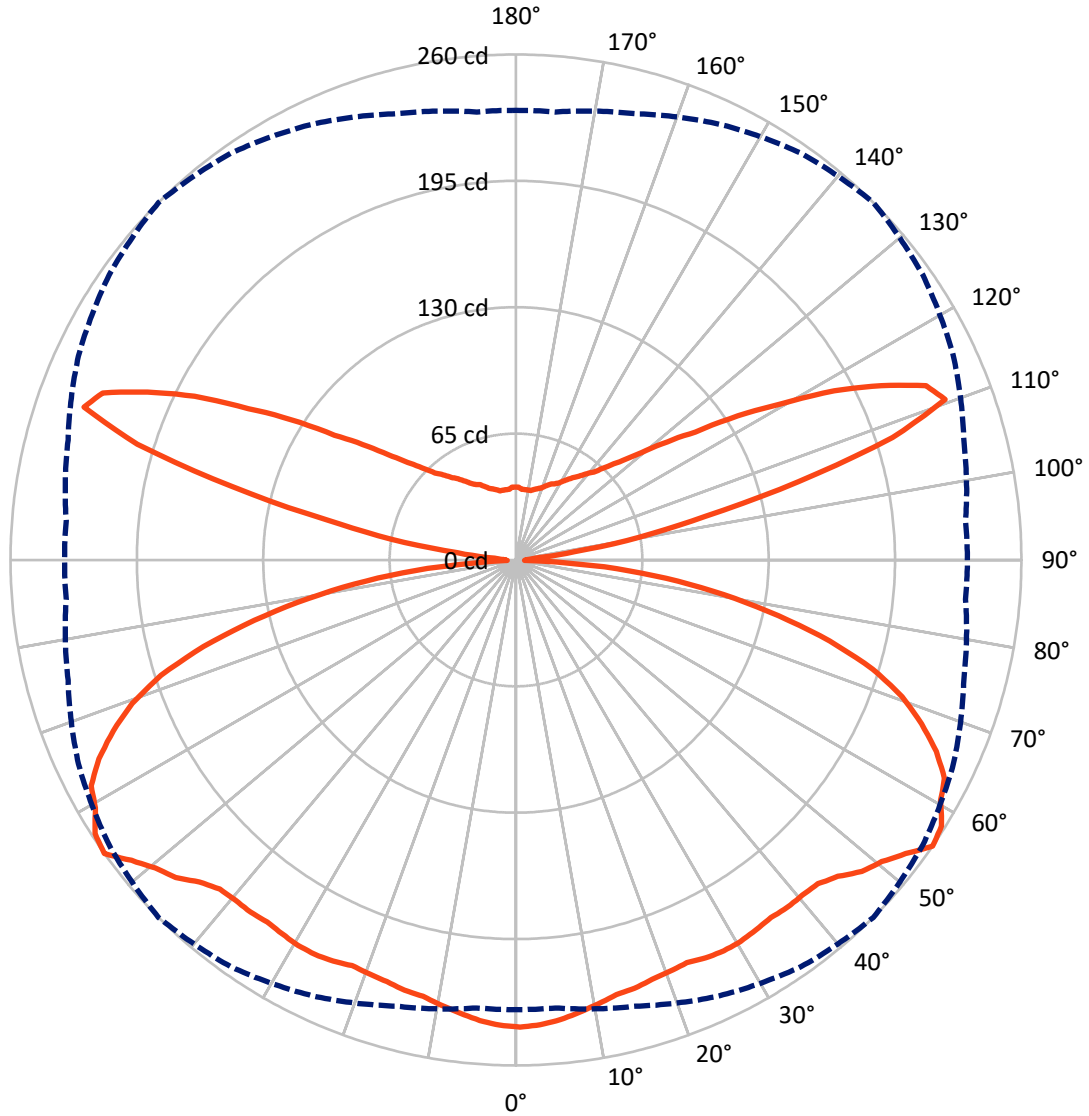
✕ Max cd  
 - - - 1/2 Max cd



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 55-Deg Vertical

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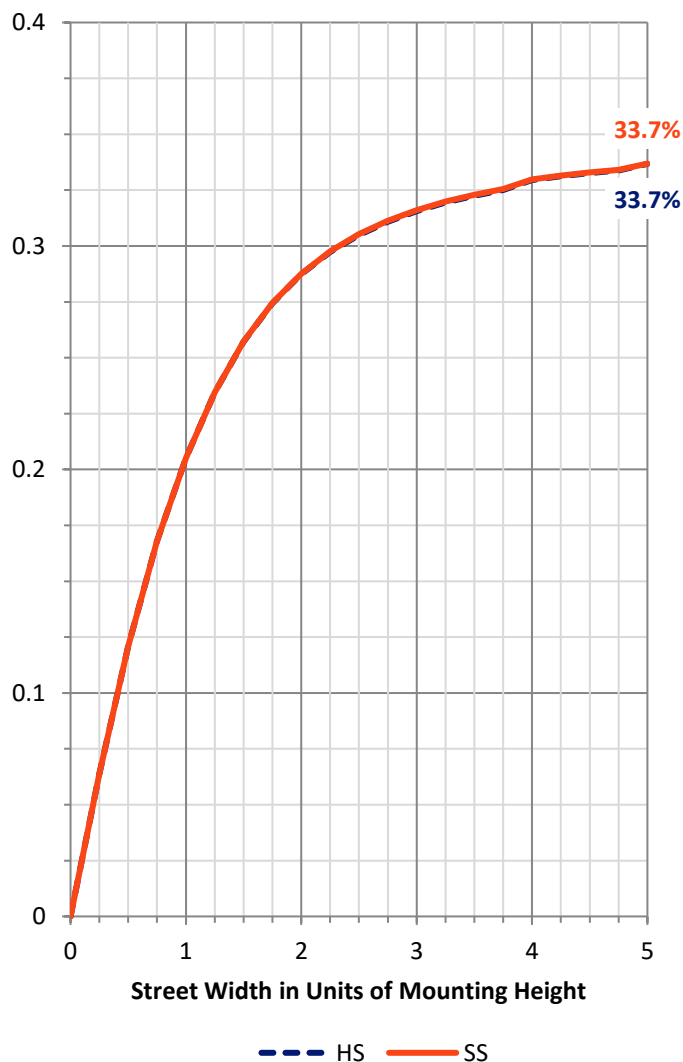
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	571.3	267.0	838.4
	% Fixture	34.1	15.9	50.0
<b>Street Side</b>	Lumens	571.3	267.0	838.4
	% Fixture	34.1	15.9	50.0
<b>Total</b>	Lumens	1142.7	534.0	1676.7
	% Fixture	68.1	31.9	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.5	1.3
10°-20°	64.6	3.8
20°-30°	104.3	6.2
30°-40°	141.2	8.4
40°-50°	176.8	10.5
50°-60°	216.7	12.9
60°-70°	217.3	13.0
70°-80°	156.8	9.4
80°-90°	42.5	2.5
90°-100°	11.9	0.7
100°-110°	121.1	7.2
110°-120°	177.1	10.6
120°-130°	102.8	6.1
130°-140°	54.4	3.2
140°-150°	32.3	1.9
150°-160°	19.9	1.2
160°-170°	10.9	0.6
170°-180°	3.5	0.2
0°-90°	1142.7	68.1
0°-180°	1676.7	100.0

**Coefficient of Utilization**



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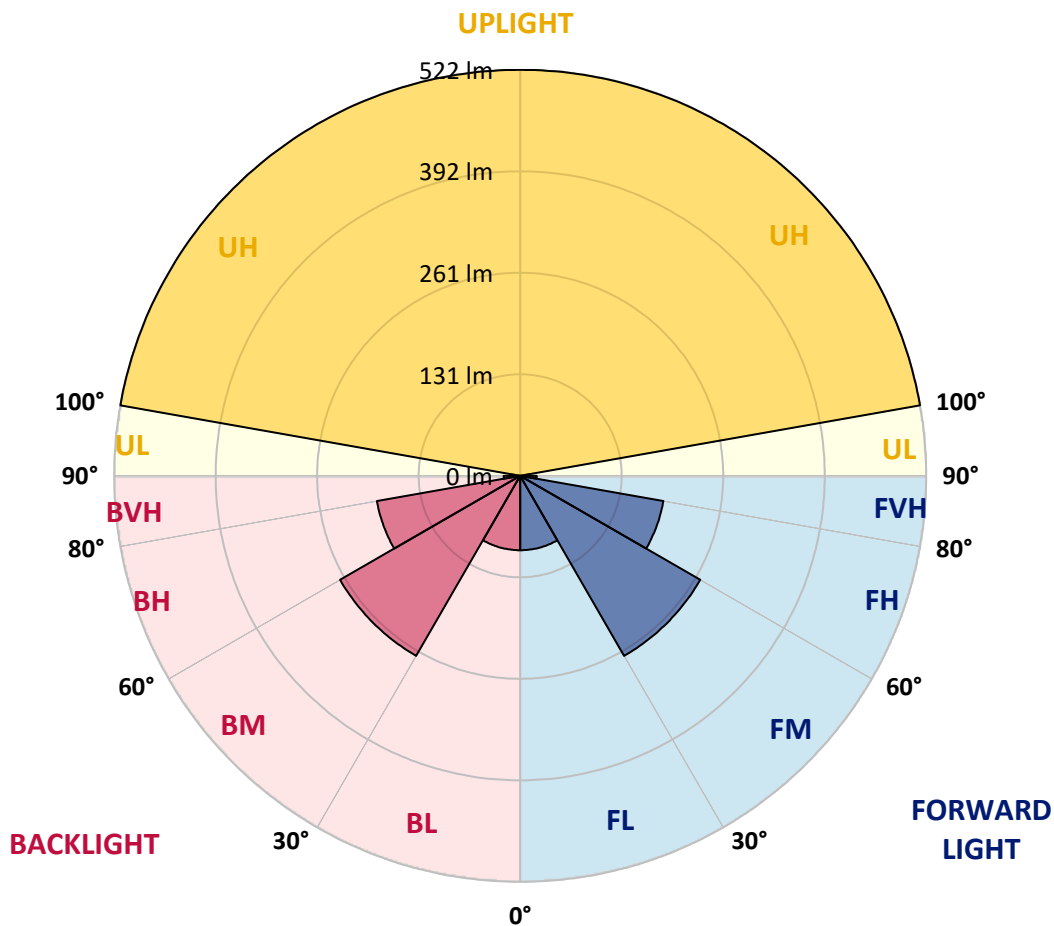
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	95.7	5.7			
FM (30°-60°)	267.4	15.9			
FH (60°-80°)	187.0	11.2			G0/660
FVH (80°-90°)	21.3	1.3			G1/100
BL (0°-30°)	95.7	5.7	B0/110		
BM (30°-60°)	267.4	15.9	B1/1000		
BH (60°-80°)	187.0	11.2	B1/500		G0/660
BVH (80°-90°)	21.3	1.3			G1/100
UL (90°-100°)	11.9	0.7		U2/50	
UH (100°-180°)	522.1	31.1		U4/1000	

**BUG Rating: B1-U4-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	240.3	240.3	240.3	240.3	240.3	240.3	240.3	240.3	240.3	240.3	240.3
2.5°	239.4	239.4	239.4	238.5	239.4	239.4	239.4	239.4	239.4	239.4	239.4
5°	237.6	237.6	237.6	237.6	237.6	237.6	237.6	237.6	237.6	237.6	237.6
7.5°	234.9	234.9	234.9	234.9	234.9	234.9	234.9	234.9	234.9	234.9	234.9
10°	231.3	231.3	231.3	231.3	232.2	232.2	232.2	232.2	231.3	231.3	231.3
12.5°	228.6	228.6	228.6	229.5	229.5	229.5	229.5	229.5	229.5	229.5	228.6
15°	227.7	227.7	227.7	227.7	228.6	228.6	228.6	228.6	227.7	227.7	227.7
17.5°	225.9	225.9	225.9	226.8	226.8	226.8	226.8	226.8	225.9	225.9	225.9
20°	224.1	224.1	225.0	225.0	225.9	225.9	225.9	225.0	225.0	224.1	225.0
22.5°	224.1	224.1	224.1	225.0	225.0	225.0	225.0	224.1	224.1	224.1	224.1
25°	224.1	224.1	225.0	225.9	225.9	226.8	225.9	225.0	224.1	224.1	224.1
27.5°	225.0	225.0	225.9	226.8	226.8	227.7	226.8	225.9	225.0	225.0	225.0
30°	225.0	225.0	225.9	226.8	226.8	227.7	226.8	225.9	225.0	225.0	225.0
32.5°	223.2	224.1	225.0	225.9	226.8	226.8	226.8	225.9	225.0	224.1	224.1
35°	222.3	223.2	224.1	225.0	225.9	225.9	225.9	225.0	224.1	223.2	223.2
37.5°	221.4	221.4	223.2	224.1	225.0	226.8	225.9	224.1	223.2	222.3	222.3
40°	220.5	221.4	222.3	224.1	225.0	226.8	225.9	224.1	222.3	221.4	221.4
42.5°	220.5	220.5	222.3	224.1	225.9	227.7	226.8	225.0	222.3	221.4	220.5
45°	221.4	222.3	225.0	228.6	230.4	232.2	231.3	228.6	224.1	222.3	221.4
47.5°	225.0	225.9	228.6	232.2	236.7	239.4	236.7	232.2	228.6	225.9	225.0
50°	226.8	227.7	232.2	236.7	243.0	243.9	243.0	236.7	232.2	227.7	227.7
52.5°	230.4	230.4	235.8	243.9	249.2	251.0	249.2	244.8	235.8	231.3	230.4
55°	231.3	231.3	237.6	247.4	255.5	260.0	255.5	248.3	238.5	232.2	232.2
57.5°	225.9	227.7	235.8	245.6	255.5	258.2	255.5	246.5	236.7	228.6	227.7
60°	219.6	222.3	229.5	241.2	248.3	251.0	249.2	241.2	230.4	222.3	221.4
62.5°	213.4	217.0	225.0	234.0	244.8	247.4	244.8	234.0	225.0	217.0	213.4
65°	199.9	203.5	215.2	225.9	235.8	237.6	236.7	225.9	215.2	203.5	201.7
67.5°	186.5	189.2	197.2	214.3	222.3	225.0	223.2	213.4	198.1	189.2	188.3
70°	172.1	174.8	182.0	198.1	206.2	210.7	207.1	198.1	182.0	174.8	173.9
72.5°	153.3	156.9	165.0	179.3	187.4	191.9	188.3	179.3	165.0	156.0	154.2
75°	130.9	133.6	143.4	155.1	163.2	166.8	164.1	156.0	143.4	133.6	132.7
77.5°	106.7	109.4	118.3	130.0	134.5	138.1	135.4	129.1	118.3	109.4	108.5
80°	80.7	83.4	91.4	100.4	104.9	108.5	105.8	99.5	91.4	83.4	82.5
82.5°	52.9	55.6	62.8	69.9	74.4	78.0	75.3	69.0	63.7	55.6	54.7
85°	22.4	25.1	31.4	38.6	42.1	45.7	43.0	37.7	31.4	26.0	25.1
87.5°	1.8	2.7	2.7	3.6	2.7	4.5	2.7	2.7	2.7	2.7	2.7
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)