

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: P832823

Luminaire Tested: **TTN-D0-735-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832823  
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-D0-735-U-WQ-CG-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

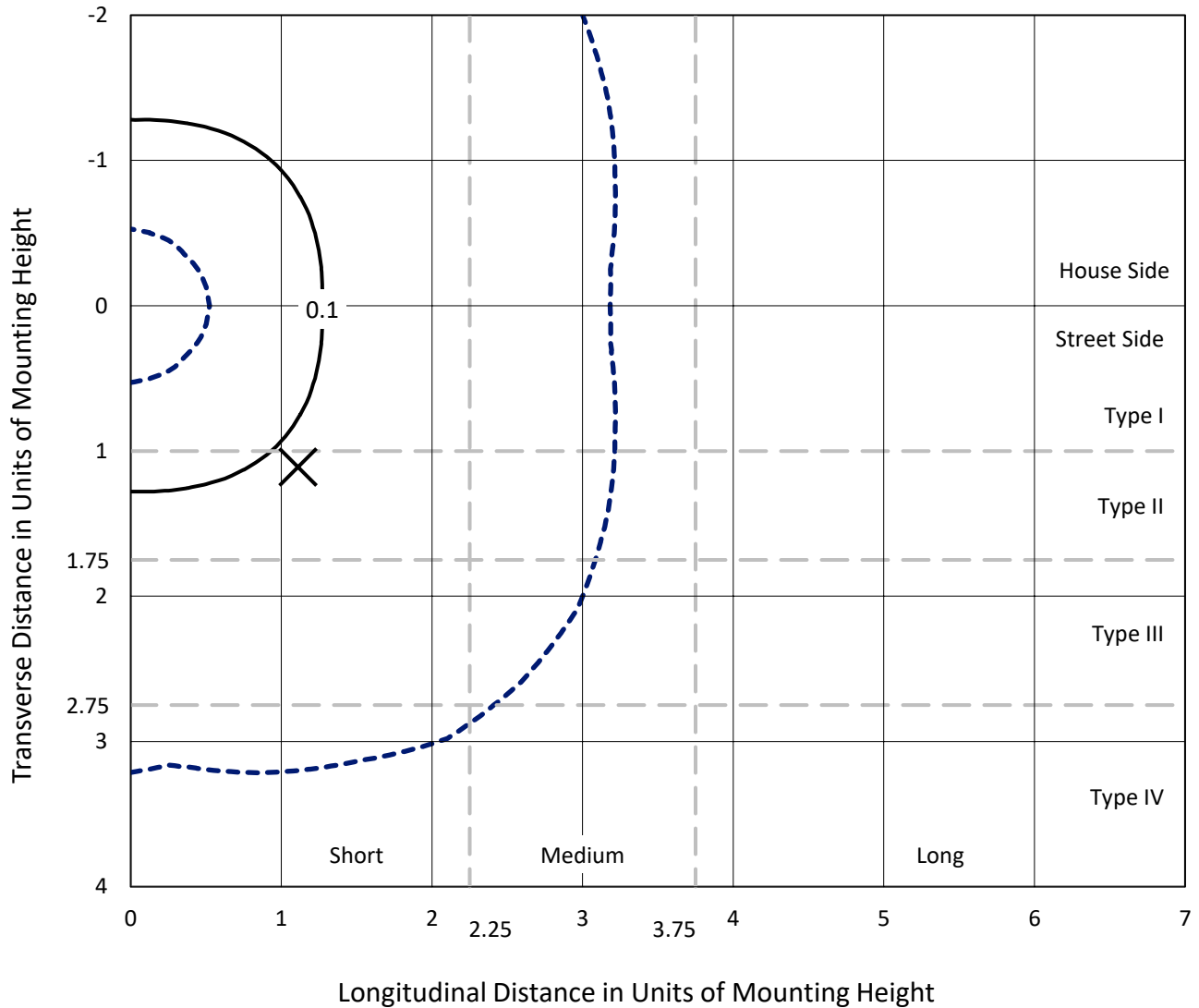
Lumens per Lamp: N/A  
Luminaire Lumens: 1637.8 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 15.2  
Input Voltage (V): NR  
Input Current (Ain): 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

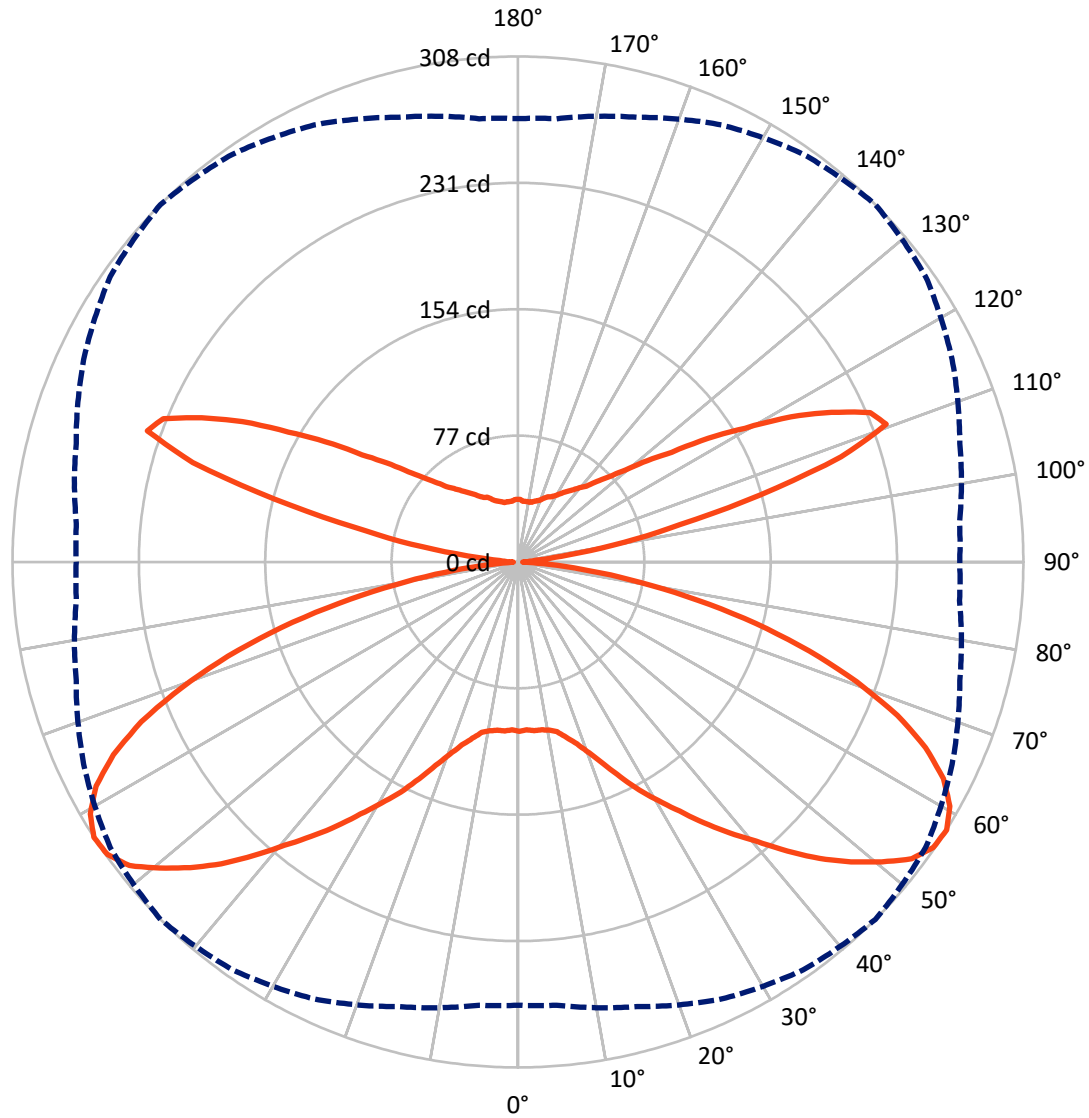
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 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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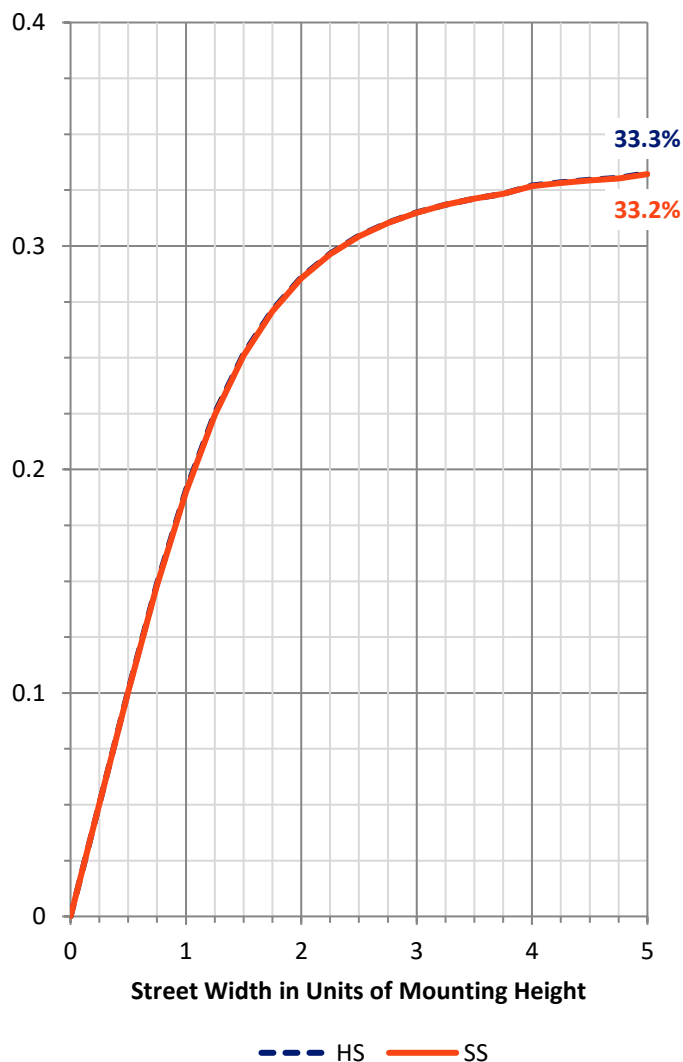
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	547.4	271.5	818.9
	% Fixture	33.4	16.6	50.0
<b>Street Side</b>	Lumens	547.4	271.5	818.9
	% Fixture	33.4	16.6	50.0
<b>Total</b>	Lumens	1094.7	543.0	1637.8
	% Fixture	66.8	33.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.9	0.6
10°-20°	31.9	1.9
20°-30°	67.0	4.1
30°-40°	120.9	7.4
40°-50°	192.1	11.7
50°-60°	256.3	15.7
60°-70°	247.7	15.1
70°-80°	143.5	8.8
80°-90°	25.5	1.6
90°-100°	12.1	0.7
100°-110°	123.2	7.5
110°-120°	180.1	11.0
120°-130°	104.5	6.4
130°-140°	55.4	3.4
140°-150°	32.9	2.0
150°-160°	20.2	1.2
160°-170°	11.0	0.7
170°-180°	3.6	0.2
0°-90°	1094.7	66.8
0°-180°	1637.8	100.0

**Coefficient of Utilization**



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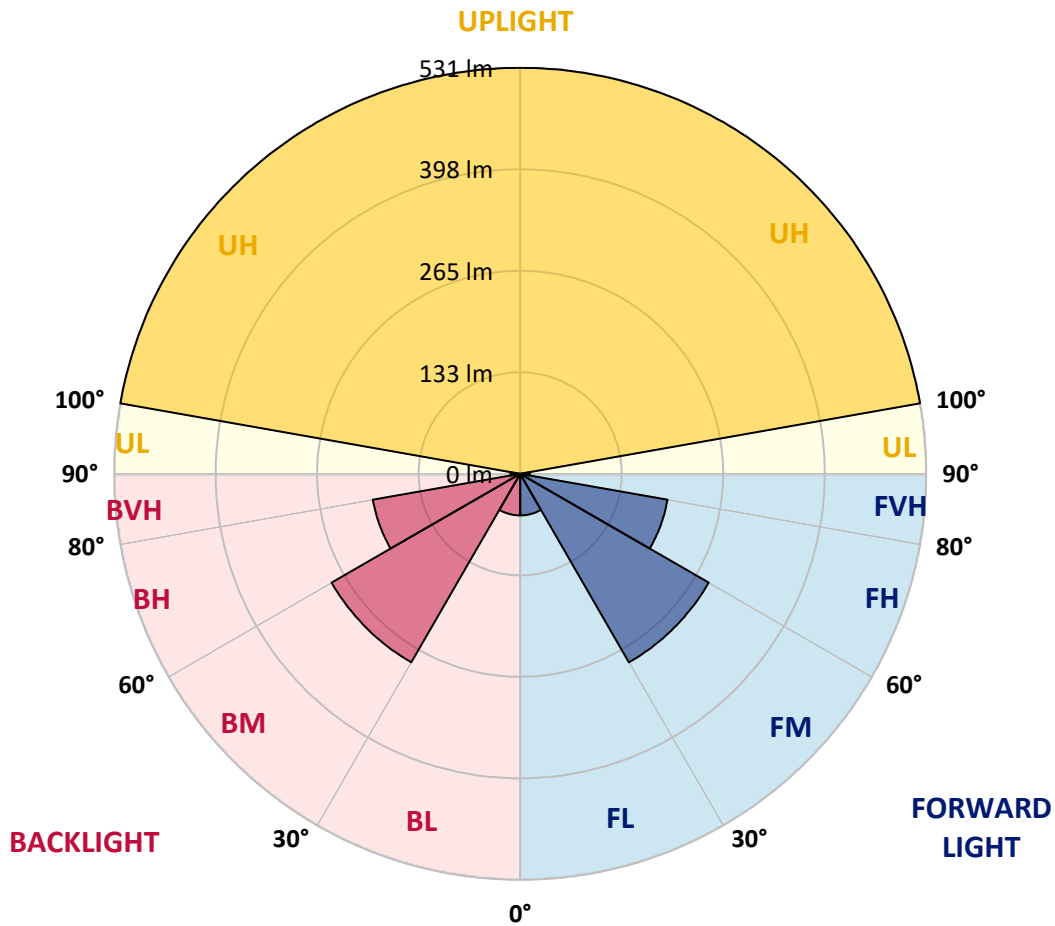
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	54.4	3.3			
FM (30°-60°)	284.7	17.4			
FH (60°-80°)	195.6	11.9			G0/660
FVH (80°-90°)	12.7	0.8			G1/100
BL (0°-30°)	54.4	3.3	B0/110		
BM (30°-60°)	284.7	17.4	B1/1000		
BH (60°-80°)	195.6	11.9	B1/500		G0/660
BVH (80°-90°)	12.7	0.8			G1/100
UL (90°-100°)	12.1	0.7		U2/50	
UH (100°-180°)	530.9	32.4		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°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
2.5°	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
5°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3
7.5°	102.4	102.4	103.3	103.3	103.3	103.3	103.3	103.3	103.3	102.4	102.4
10°	103.3	103.3	103.3	104.3	104.3	104.3	104.3	104.3	103.3	103.3	103.3
12.5°	105.2	105.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	105.2	105.2
15°	110.0	110.0	110.0	110.9	110.9	110.9	110.9	110.9	110.0	110.0	110.0
17.5°	114.7	114.7	115.7	115.7	116.6	116.6	116.6	115.7	115.7	115.7	115.7
20°	121.4	121.4	122.3	122.3	123.3	124.2	124.2	123.3	122.3	122.3	122.3
22.5°	129.9	130.8	130.8	130.8	131.8	133.7	132.7	131.8	130.8	130.8	130.8
25°	140.3	141.3	142.2	142.2	143.2	145.1	145.1	142.2	142.2	142.2	142.2
27.5°	152.7	153.6	154.5	154.5	155.5	157.4	156.4	154.5	154.5	153.6	153.6
30°	164.0	165.0	165.9	166.9	167.8	168.8	168.8	166.9	165.9	165.0	164.0
32.5°	175.4	175.4	177.3	179.2	181.1	181.1	182.0	179.2	177.3	175.4	174.5
35°	186.8	187.7	188.7	191.5	194.4	195.3	194.4	191.5	188.7	186.8	186.8
37.5°	199.1	200.1	201.0	204.8	207.6	209.5	207.6	204.8	201.0	199.1	198.2
40°	212.4	213.3	214.3	219.0	221.9	223.8	220.9	218.1	214.3	212.4	211.4
42.5°	224.7	226.6	228.5	234.2	238.9	240.8	238.0	233.2	229.4	224.7	223.8
45°	239.9	241.8	244.6	250.3	255.0	257.9	254.1	249.4	243.7	239.9	238.9
47.5°	252.2	254.1	256.9	264.5	271.2	273.1	269.3	263.6	256.0	251.3	250.3
50°	261.7	263.6	269.3	277.8	285.4	287.3	283.5	275.9	267.4	260.7	259.8
52.5°	269.3	271.2	277.8	289.2	297.7	300.6	295.8	287.3	275.9	268.3	267.4
55°	273.1	274.0	282.5	294.9	303.4	307.2	302.5	293.0	280.6	272.1	271.2
57.5°	270.2	271.2	280.6	293.9	303.4	308.1	303.4	292.0	278.8	270.2	269.3
60°	264.5	264.5	273.1	288.2	299.6	302.5	297.7	286.3	272.1	263.6	262.6
62.5°	254.1	253.2	263.6	276.9	288.2	291.1	287.3	275.9	261.7	253.2	252.2
65°	234.2	232.3	247.5	259.8	270.2	273.1	270.2	259.8	246.5	233.2	231.3
67.5°	210.5	207.6	221.9	236.1	245.6	249.4	245.6	237.0	221.9	208.6	207.6
70°	185.8	183.0	194.4	206.7	217.1	219.0	215.2	206.7	192.5	183.9	183.9
72.5°	156.4	153.6	164.0	173.5	183.9	185.8	182.0	174.5	164.0	155.5	154.5
75°	124.2	121.4	130.8	138.4	148.9	149.8	147.9	139.4	130.8	122.3	122.3
77.5°	92.0	89.1	96.7	103.3	111.9	111.9	110.9	104.3	96.7	91.0	91.0
80°	60.7	58.8	65.4	68.3	75.9	75.9	74.9	70.2	64.5	60.7	59.7
82.5°	34.1	32.2	37.9	38.9	44.6	44.6	43.6	39.8	36.0	33.2	33.2
85°	13.3	11.4	15.2	16.1	19.0	19.0	18.0	17.1	14.2	12.3	12.3
87.5°	0.9	0.9	1.9	1.9	2.8	2.8	2.8	1.9	1.9	0.9	0.9
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)