

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: P833183

Luminaire Tested: **TTN-D1-735-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833183  
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-D1-735-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**

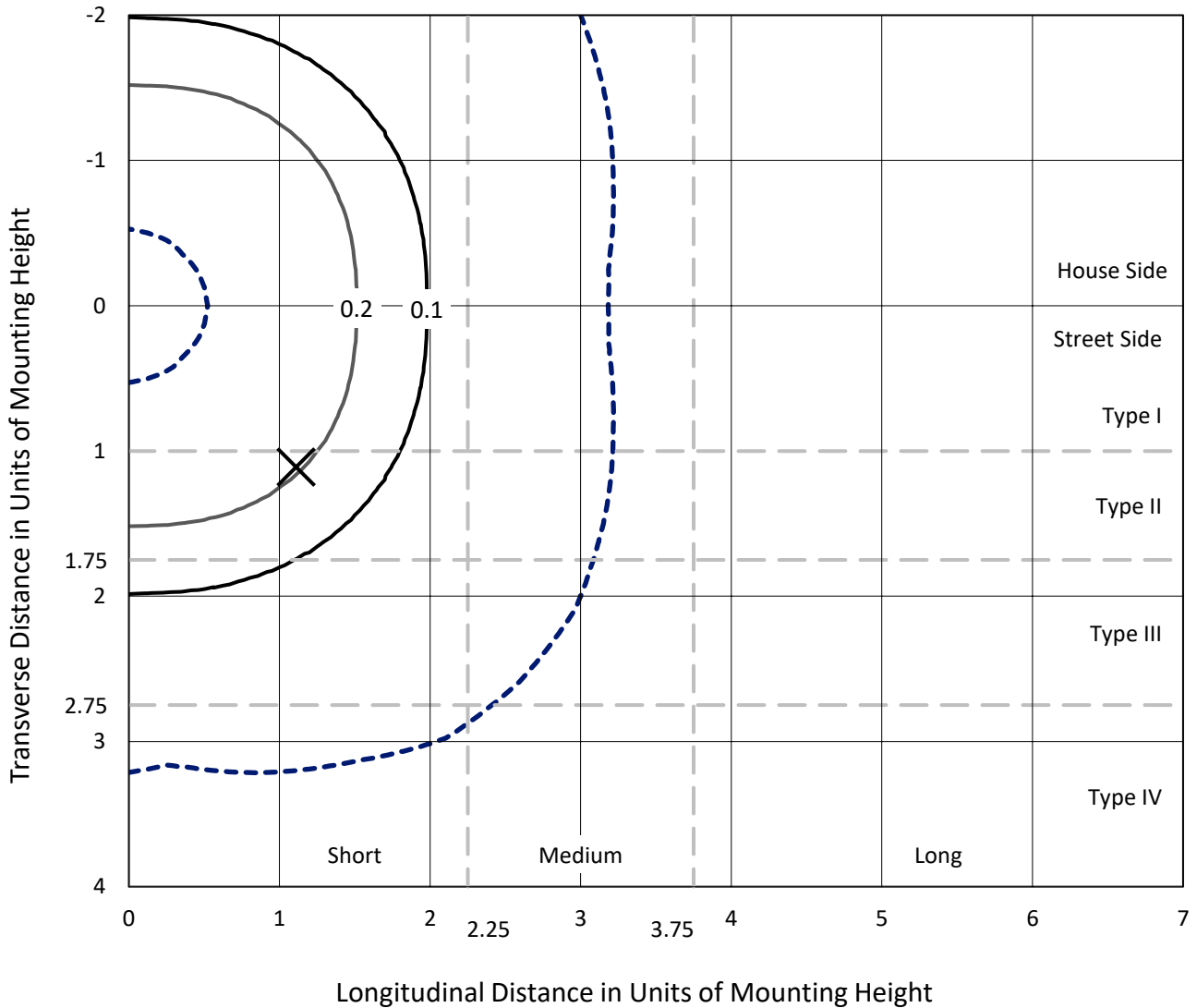
Lumens per Lamp: N/A  
Luminaire Lumens: 3569.8 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

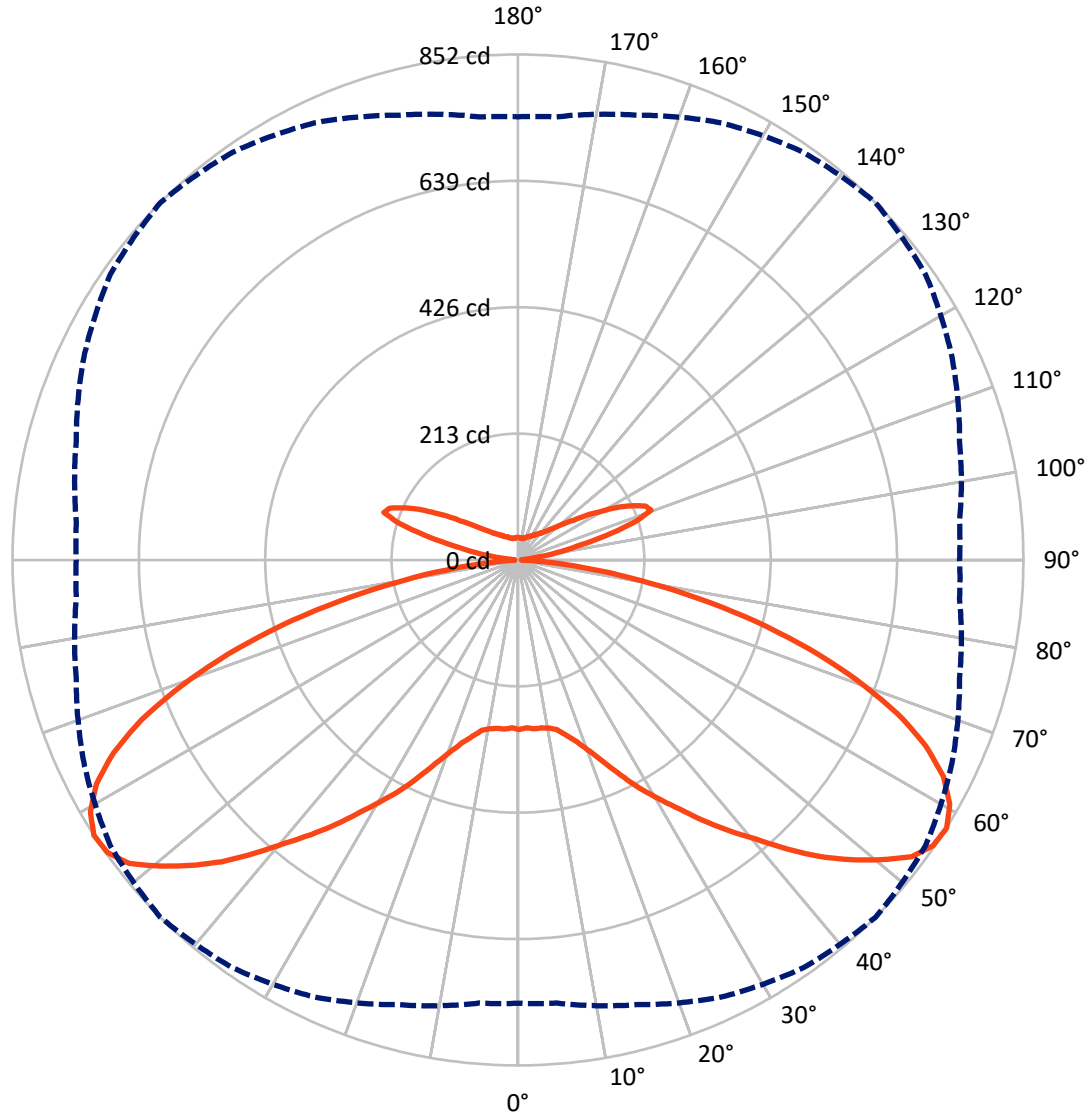
× Max cd  
 - - - 1/2 Max cd



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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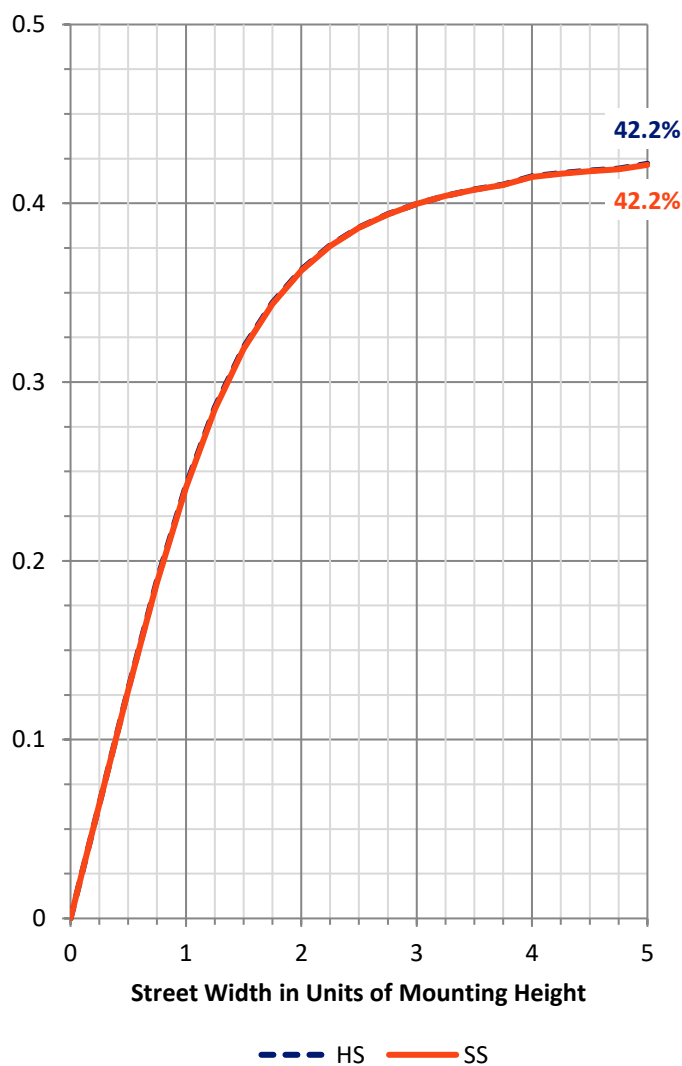
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1513.4	271.5	1784.9
	% Fixture	42.4	7.6	50.0
<b>Street Side</b>	Lumens	1513.4	271.5	1784.9
	% Fixture	42.4	7.6	50.0
<b>Total</b>	Lumens	3026.7	543.0	3569.8
	% Fixture	84.8	15.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.3	0.8
10°-20°	88.1	2.5
20°-30°	185.4	5.2
30°-40°	334.3	9.4
40°-50°	531.4	14.9
50°-60°	709.0	19.9
60°-70°	685.0	19.2
70°-80°	397.0	11.1
80°-90°	69.2	1.9
90°-100°	12.1	0.3
100°-110°	123.2	3.5
110°-120°	180.1	5.0
120°-130°	104.5	2.9
130°-140°	55.4	1.6
140°-150°	32.9	0.9
150°-160°	20.2	0.6
160°-170°	11.0	0.3
170°-180°	3.6	0.1
0°-90°	3026.7	84.8
0°-180°	3569.8	100.0

**Coefficient of Utilization**

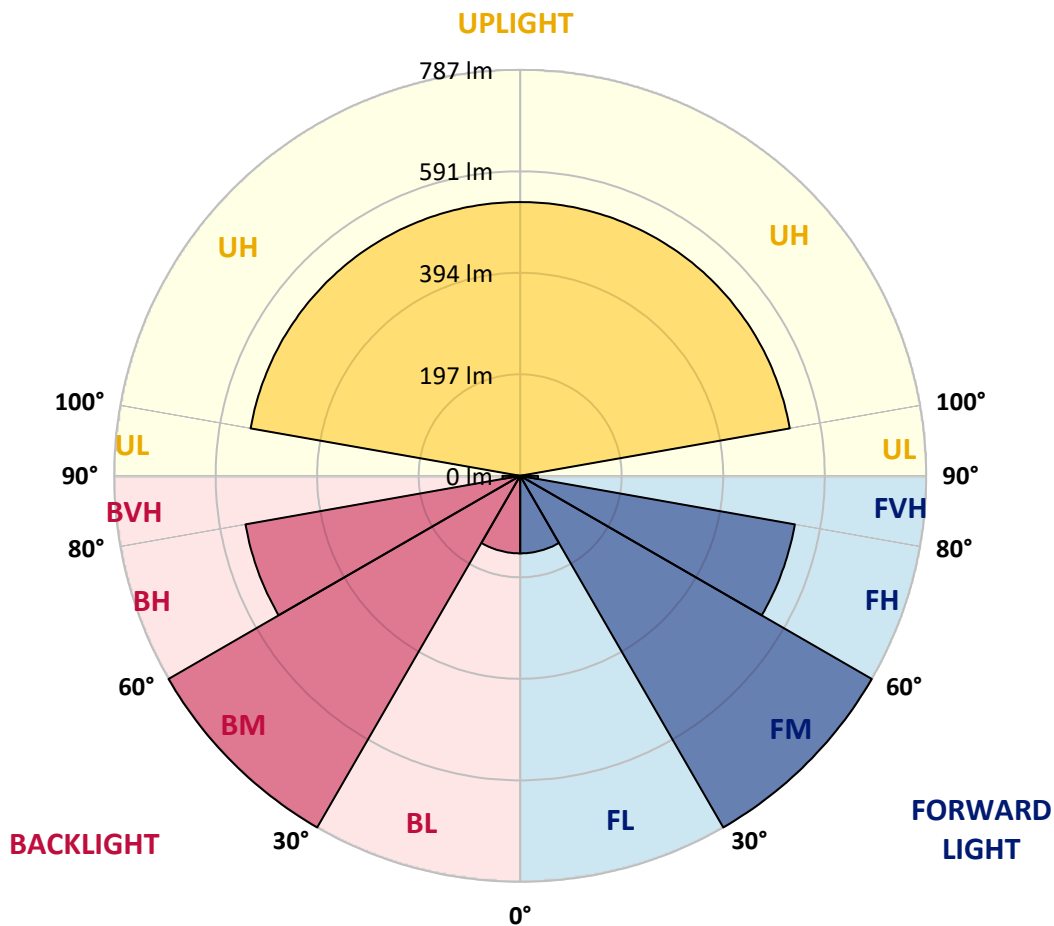


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	150.4	4.2			
FM (30°-60°)	787.4	22.1			
FH (60°-80°)	541.0	15.2			G0/660
FVH (80°-90°)	34.6	1.0			G1/100
BL (0°-30°)	150.4	4.2	B1/500		
BM (30°-60°)	787.4	22.1	B1/1000		
BH (60°-80°)	541.0	15.2	B2/1000		G0/660
BVH (80°-90°)	34.6	1.0			G1/100
UL (90°-100°)	12.1	0.3		U2/50	
UH (100°-180°)	530.9	14.9		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°	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9
2.5°	283.2	283.2	283.2	283.2	283.2	283.2	283.2	283.2	283.2	283.2	283.2
5°	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9	285.9
7.5°	283.2	283.2	285.9	285.9	285.9	285.9	285.9	285.9	285.9	283.2	283.2
10°	285.9	285.9	285.9	288.5	288.5	288.5	288.5	288.5	285.9	285.9	285.9
12.5°	291.1	291.1	293.7	293.7	293.7	293.7	293.7	293.7	293.7	291.1	291.1
15°	304.2	304.2	304.2	306.8	306.8	306.8	306.8	306.8	304.2	304.2	304.2
17.5°	317.3	317.3	320.0	320.0	322.6	322.6	322.6	320.0	320.0	320.0	320.0
20°	335.7	335.7	338.3	338.3	340.9	343.6	343.6	340.9	338.3	338.3	338.3
22.5°	359.3	361.9	361.9	361.9	364.5	369.8	367.2	364.5	361.9	361.9	361.9
25°	388.1	390.8	393.4	393.4	396.0	401.3	401.3	393.4	393.4	393.4	393.4
27.5°	422.2	424.9	427.5	427.5	430.1	435.3	432.7	427.5	427.5	424.9	424.9
30°	453.7	456.3	458.9	461.6	464.2	466.8	466.8	461.6	458.9	456.3	453.7
32.5°	485.2	485.2	490.4	495.7	500.9	500.9	503.5	495.7	490.4	485.2	482.5
35°	516.6	519.3	521.9	529.8	537.6	540.2	537.6	529.8	521.9	516.6	516.6
37.5°	550.7	553.4	556.0	566.5	574.3	579.6	574.3	566.5	556.0	550.7	548.1
40°	587.5	590.1	592.7	605.8	613.7	618.9	611.1	603.2	592.7	587.5	584.8
42.5°	621.5	626.8	632.0	647.8	660.9	666.1	658.3	645.1	634.7	621.5	618.9
45°	663.5	668.8	676.6	692.4	705.5	713.3	702.8	689.7	674.0	663.5	660.9
47.5°	697.6	702.8	710.7	731.7	750.0	755.3	744.8	729.1	708.1	695.0	692.4
50°	723.8	729.1	744.8	768.4	789.4	794.6	784.1	763.2	739.6	721.2	718.6
52.5°	744.8	750.0	768.4	799.9	823.5	831.3	818.2	794.6	763.2	742.2	739.6
55°	755.3	757.9	781.5	815.6	839.2	849.7	836.6	810.4	776.3	752.7	750.0
57.5°	747.4	750.0	776.3	813.0	839.2	852.3	839.2	807.7	771.0	747.4	744.8
60°	731.7	731.7	755.3	797.3	828.7	836.6	823.5	792.0	752.7	729.1	726.4
62.5°	702.8	700.2	729.1	765.8	797.3	805.1	794.6	763.2	723.8	700.2	697.6
65°	647.8	642.5	684.5	718.6	747.4	755.3	747.4	718.6	681.9	645.1	639.9
67.5°	582.2	574.3	613.7	653.0	679.2	689.7	679.2	655.6	613.7	577.0	574.3
70°	514.0	506.2	537.6	571.7	600.6	605.8	595.3	571.7	532.4	508.8	508.8
72.5°	432.7	424.9	453.7	479.9	508.8	514.0	503.5	482.5	453.7	430.1	427.5
75°	343.6	335.7	361.9	382.9	411.7	414.4	409.1	385.5	361.9	338.3	338.3
77.5°	254.4	246.5	267.5	285.9	309.5	309.5	306.8	288.5	267.5	251.8	251.8
80°	167.8	162.6	181.0	188.8	209.8	209.8	207.2	194.1	178.3	167.8	165.2
82.5°	94.4	89.2	104.9	107.5	123.3	123.3	120.6	110.1	99.7	91.8	91.8
85°	36.7	31.5	42.0	44.6	52.5	52.5	49.8	47.2	39.3	34.1	34.1
87.5°	2.6	2.6	5.2	5.2	7.9	7.9	7.9	5.2	5.2	2.6	2.6
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)