

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: P833189

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

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833189  
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-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

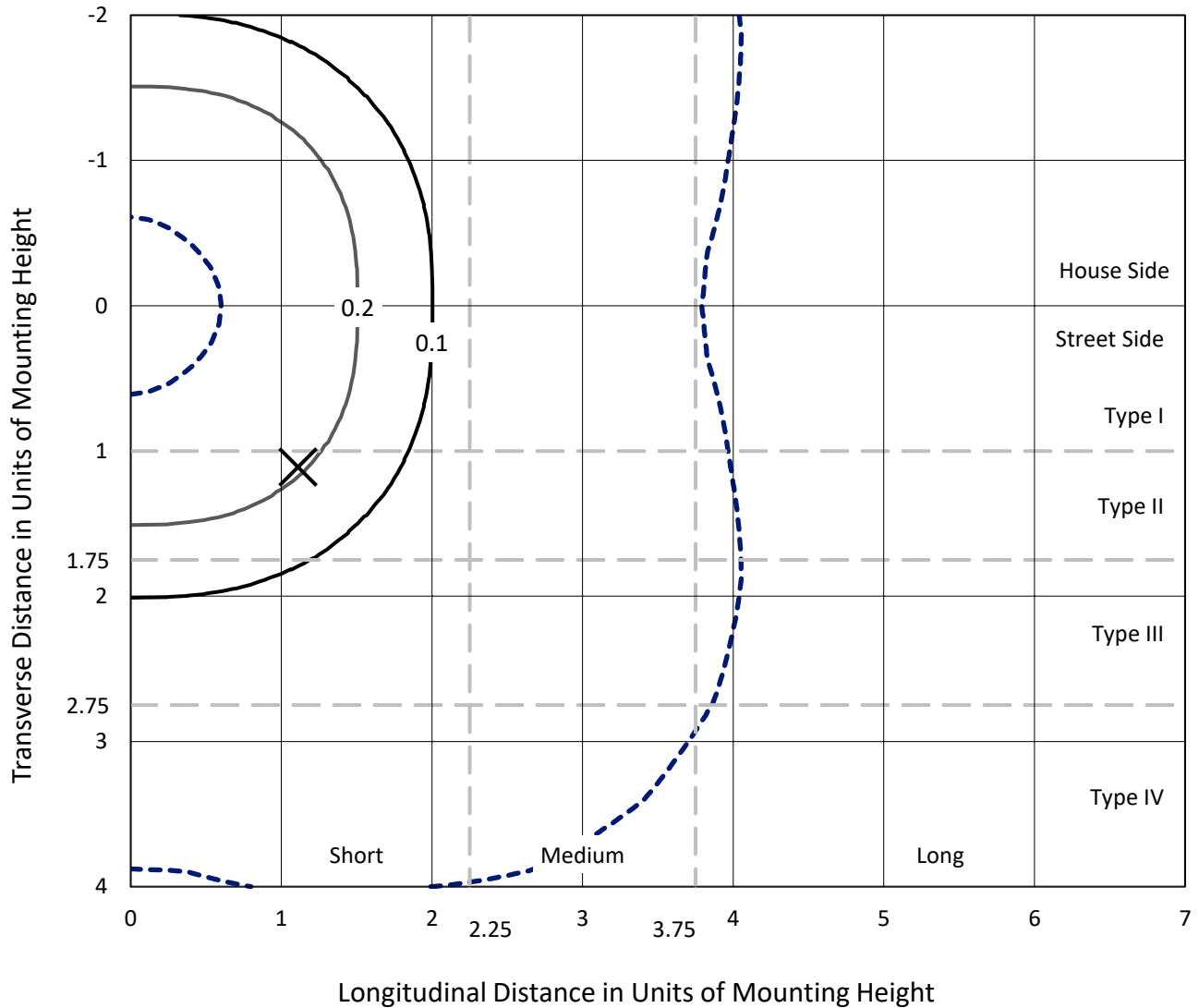
Lumens per Lamp: N/A  
Luminaire Lumens: 3729.8 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

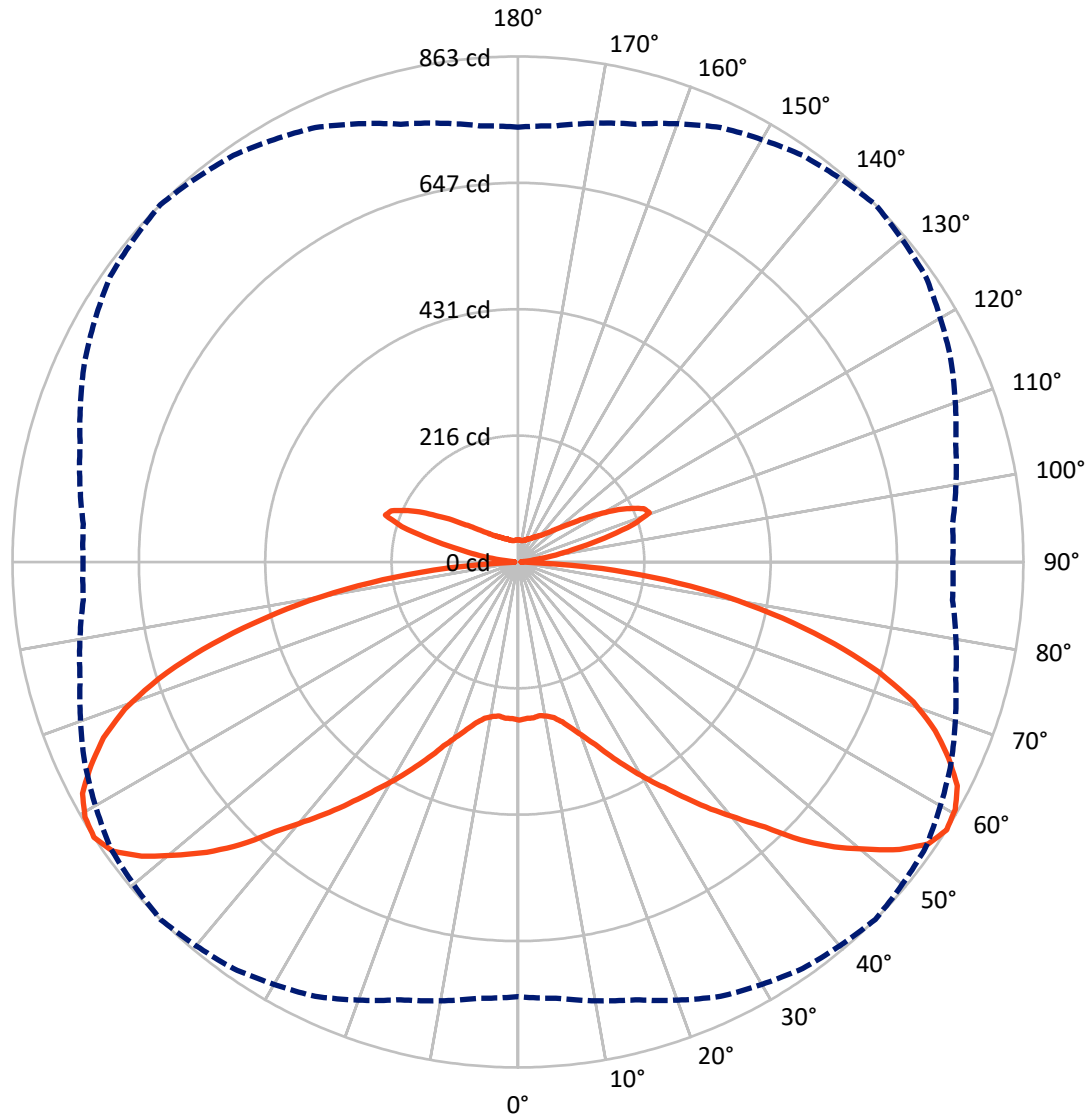
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.4 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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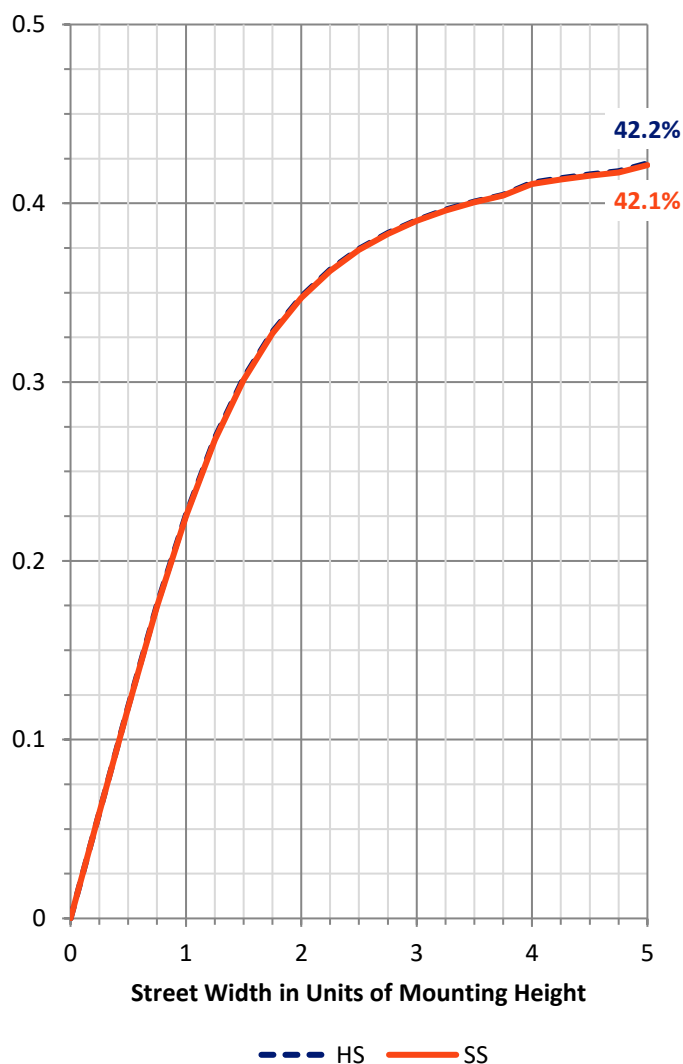
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1593.4	271.5	1864.9
	% Fixture	42.7	7.3	50.0
<b>Street Side</b>	Lumens	1593.4	271.5	1864.9
	% Fixture	42.7	7.3	50.0
<b>Total</b>	Lumens	3186.7	543.0	3729.8
	% Fixture	85.4	14.6	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.4	0.7
10°-20°	81.0	2.2
20°-30°	170.0	4.6
30°-40°	308.3	8.3
40°-50°	502.7	13.5
50°-60°	703.6	18.9
60°-70°	734.5	19.7
70°-80°	524.8	14.1
80°-90°	136.5	3.7
90°-100°	12.1	0.3
100°-110°	123.2	3.3
110°-120°	180.1	4.8
120°-130°	104.5	2.8
130°-140°	55.4	1.5
140°-150°	32.9	0.9
150°-160°	20.2	0.5
160°-170°	11.0	0.3
170°-180°	3.6	0.1
0°-90°	3186.7	85.4
0°-180°	3729.8	100.0

**Coefficient of Utilization**



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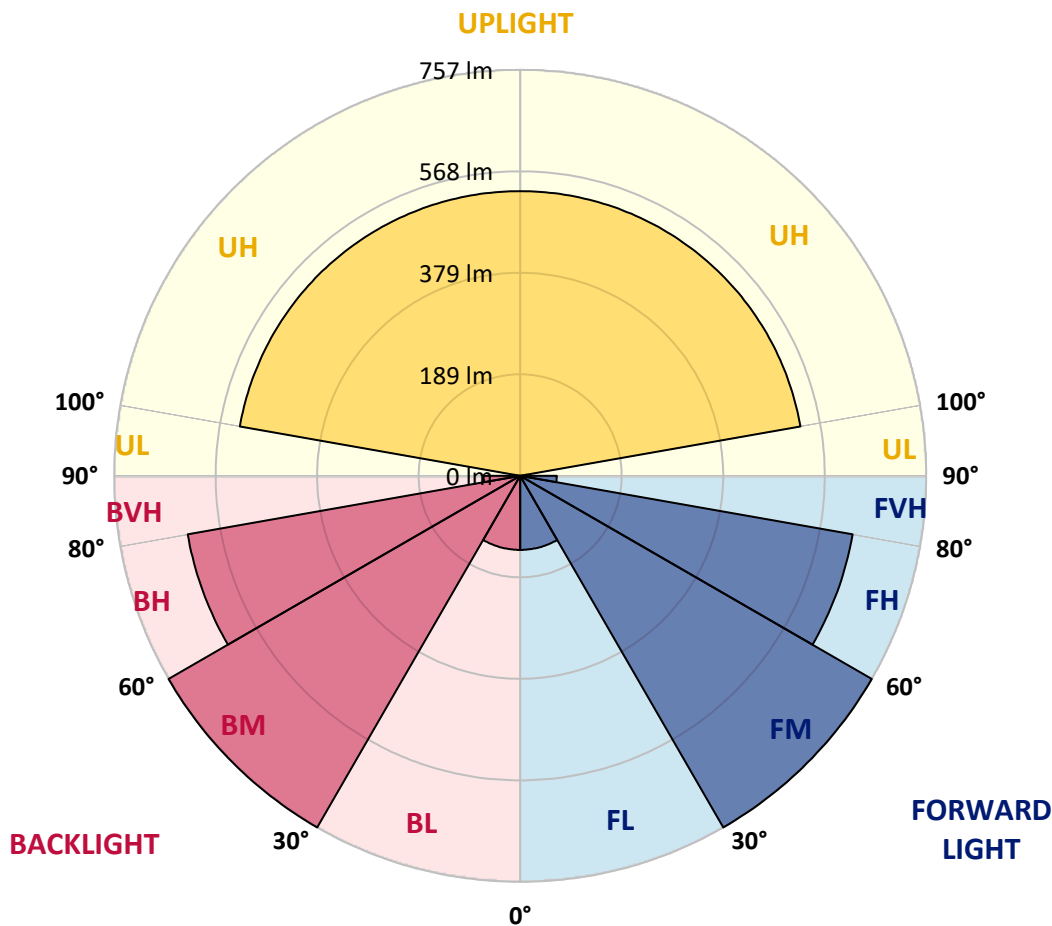
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.2	3.7			
FM (30°-60°)	757.3	20.3			
FH (60°-80°)	629.7	16.9			G0/660
FVH (80°-90°)	68.3	1.8			G1/100
BL (0°-30°)	138.2	3.7	B1/500		
BM (30°-60°)	757.3	20.3	B1/1000		
BH (60°-80°)	629.7	16.9	B2/1000		G0/660
BVH (80°-90°)	68.3	1.8			G1/100
UL (90°-100°)	12.1	0.3		U2/50	
UH (100°-180°)	530.9	14.2		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°	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1
2.5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
7.5°	262.2	262.2	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8
10°	262.2	262.2	264.8	264.8	267.4	267.4	267.4	264.8	264.8	262.2	262.2
12.5°	267.4	267.4	267.4	270.1	272.7	272.7	272.7	270.1	270.1	267.4	267.4
15°	275.3	277.9	277.9	280.5	283.2	283.2	283.2	280.5	280.5	277.9	277.9
17.5°	291.0	291.0	291.0	293.7	296.3	298.9	298.9	293.7	293.7	291.0	293.7
20°	306.8	309.4	309.4	312.0	314.6	317.3	314.6	312.0	309.4	309.4	309.4
22.5°	330.4	330.4	333.0	333.0	338.2	338.2	338.2	333.0	333.0	333.0	333.0
25°	356.6	356.6	359.2	361.8	367.1	367.1	364.4	359.2	359.2	359.2	361.8
27.5°	388.0	388.0	390.7	390.7	395.9	395.9	393.3	390.7	390.7	390.7	393.3
30°	416.9	416.9	422.1	424.7	427.4	427.4	427.4	422.1	422.1	419.5	419.5
32.5°	443.1	445.7	448.3	456.2	461.5	458.8	461.5	456.2	451.0	448.3	448.3
35°	471.9	474.6	479.8	487.7	495.5	495.5	495.5	487.7	482.4	477.2	479.8
37.5°	506.0	506.0	513.9	521.8	532.2	534.9	532.2	524.4	516.5	511.3	511.3
40°	542.7	542.7	550.6	558.5	571.6	574.2	571.6	561.1	550.6	548.0	548.0
42.5°	579.4	579.4	589.9	597.8	613.5	618.8	613.5	600.4	589.9	582.1	584.7
45°	618.8	621.4	634.5	650.2	668.6	676.5	668.6	652.9	637.1	621.4	621.4
47.5°	663.3	663.3	679.1	697.4	718.4	726.3	715.8	700.1	679.1	666.0	666.0
50°	692.2	694.8	715.8	739.4	765.6	770.8	763.0	739.4	715.8	697.4	694.8
52.5°	721.0	723.6	747.2	781.3	807.5	815.4	804.9	781.3	747.2	723.6	723.6
55°	739.4	744.6	770.8	807.5	836.4	849.5	833.8	807.5	768.2	742.0	739.4
57.5°	742.0	747.2	773.5	818.0	846.9	862.6	849.5	815.4	773.5	744.6	742.0
60°	736.8	739.4	765.6	812.8	846.9	857.4	846.9	810.2	763.0	739.4	734.1
62.5°	723.6	728.9	755.1	794.4	833.8	841.6	831.1	791.8	752.5	723.6	718.4
65°	681.7	686.9	726.3	765.6	799.7	807.5	799.7	765.6	723.6	681.7	676.5
67.5°	634.5	637.1	676.5	723.6	755.1	768.2	755.1	726.3	673.8	634.5	629.3
70°	584.7	587.3	618.8	668.6	700.1	715.8	702.7	671.2	616.1	582.1	579.4
72.5°	527.0	527.0	558.5	597.8	629.3	645.0	634.5	595.2	553.2	519.1	513.9
75°	448.3	451.0	485.1	513.9	548.0	558.5	548.0	516.5	477.2	443.1	437.9
77.5°	367.1	369.7	398.5	422.1	453.6	461.5	453.6	427.4	390.7	361.8	359.2
80°	277.9	280.5	304.1	325.1	351.3	361.8	354.0	327.7	298.9	272.7	264.8
82.5°	180.9	183.5	207.1	222.9	246.5	254.3	249.1	225.5	201.9	175.7	173.0
85°	81.3	83.9	104.9	118.0	136.3	144.2	139.0	118.0	99.6	76.0	70.8
87.5°	7.9	7.9	7.9	7.9	7.9	10.5	10.5	7.9	7.9	7.9	7.9
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)