

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: P833170

Luminaire Tested: **TTN-D1-735-U-MQ-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833170
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-MQ-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3531.9 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U3 - G1

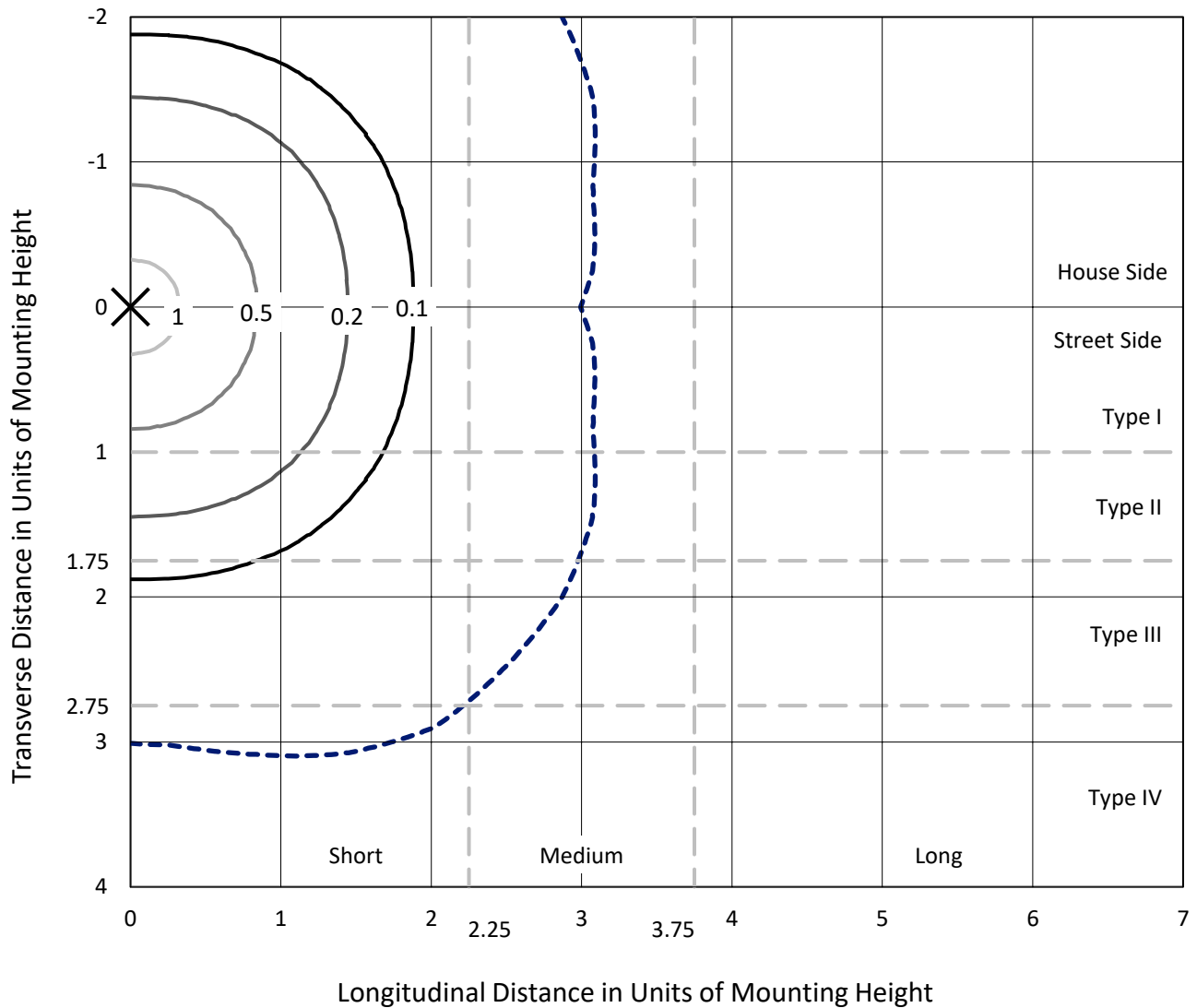
Input Watts (W): 29
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

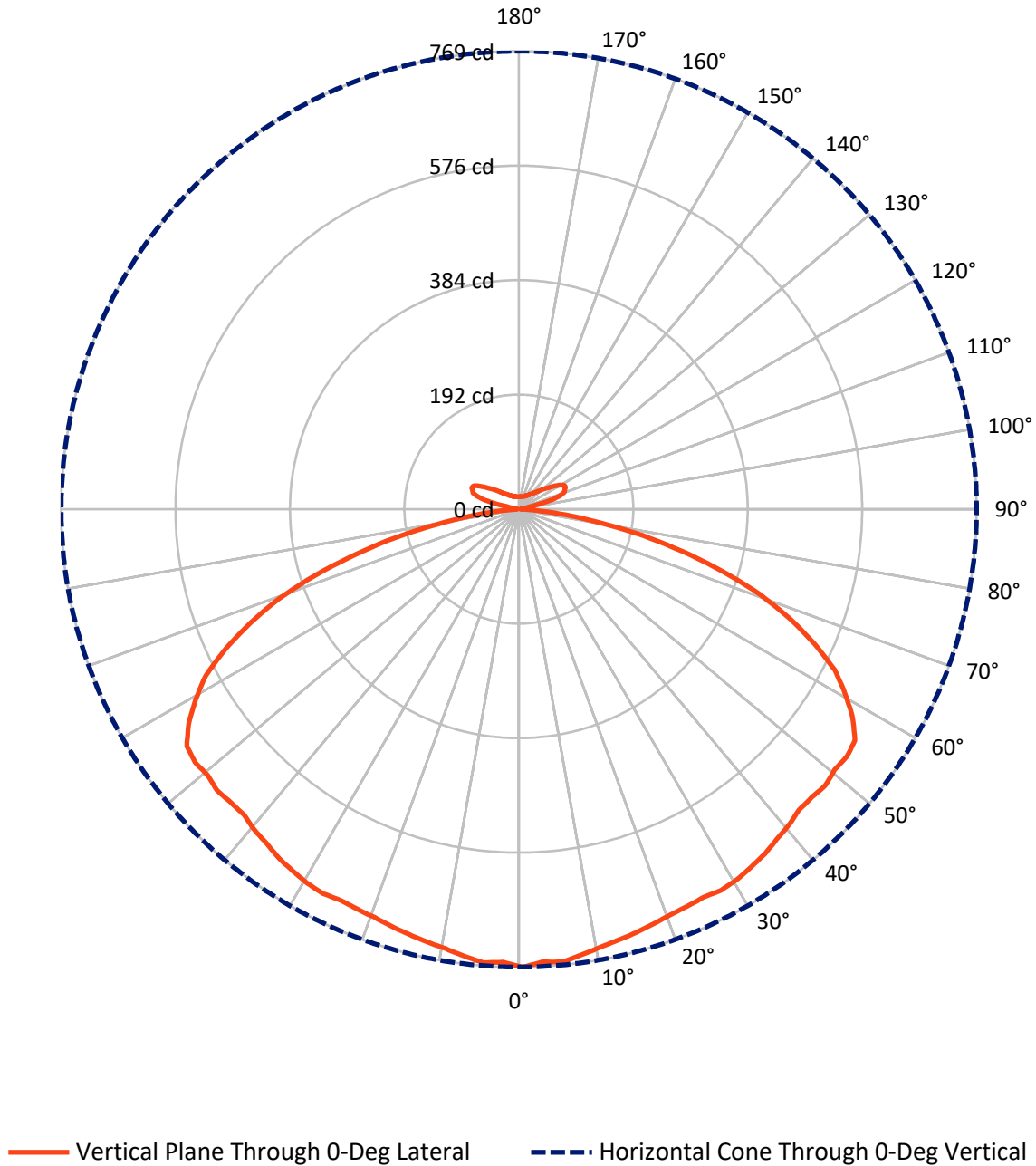
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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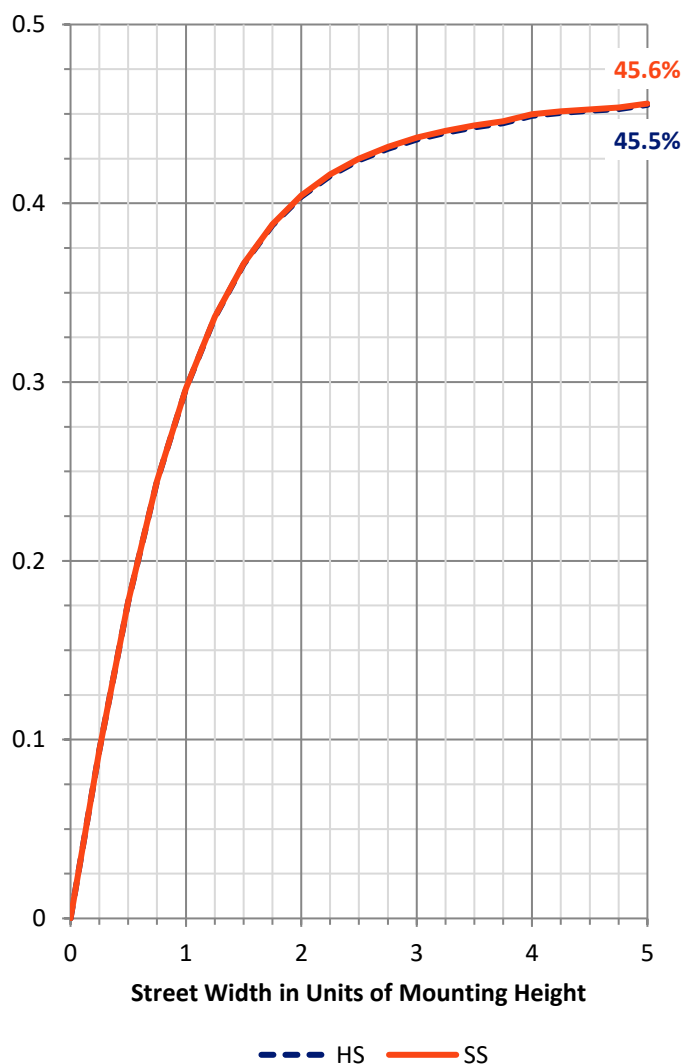
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1615.7	150.2	1765.9
	% Fixture	45.7	4.3	50.0
Street Side	Lumens	1615.7	150.2	1765.9
	% Fixture	45.7	4.3	50.0
Total	Lumens	3231.4	300.5	3531.9
	% Fixture	91.5	8.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	2.0
10°-20°	208.8	5.9
20°-30°	335.9	9.5
30°-40°	448.8	12.7
40°-50°	545.2	15.4
50°-60°	633.5	17.9
60°-70°	584.5	16.5
70°-80°	342.1	9.7
80°-90°	60.4	1.7
90°-100°	6.7	0.2
100°-110°	68.2	1.9
110°-120°	99.6	2.8
120°-130°	57.8	1.6
130°-140°	30.6	0.9
140°-150°	18.2	0.5
150°-160°	11.2	0.3
160°-170°	6.1	0.2
170°-180°	2.0	0.1
0°-90°	3231.4	91.5
0°-180°	3531.9	100.0

Coefficient of Utilization



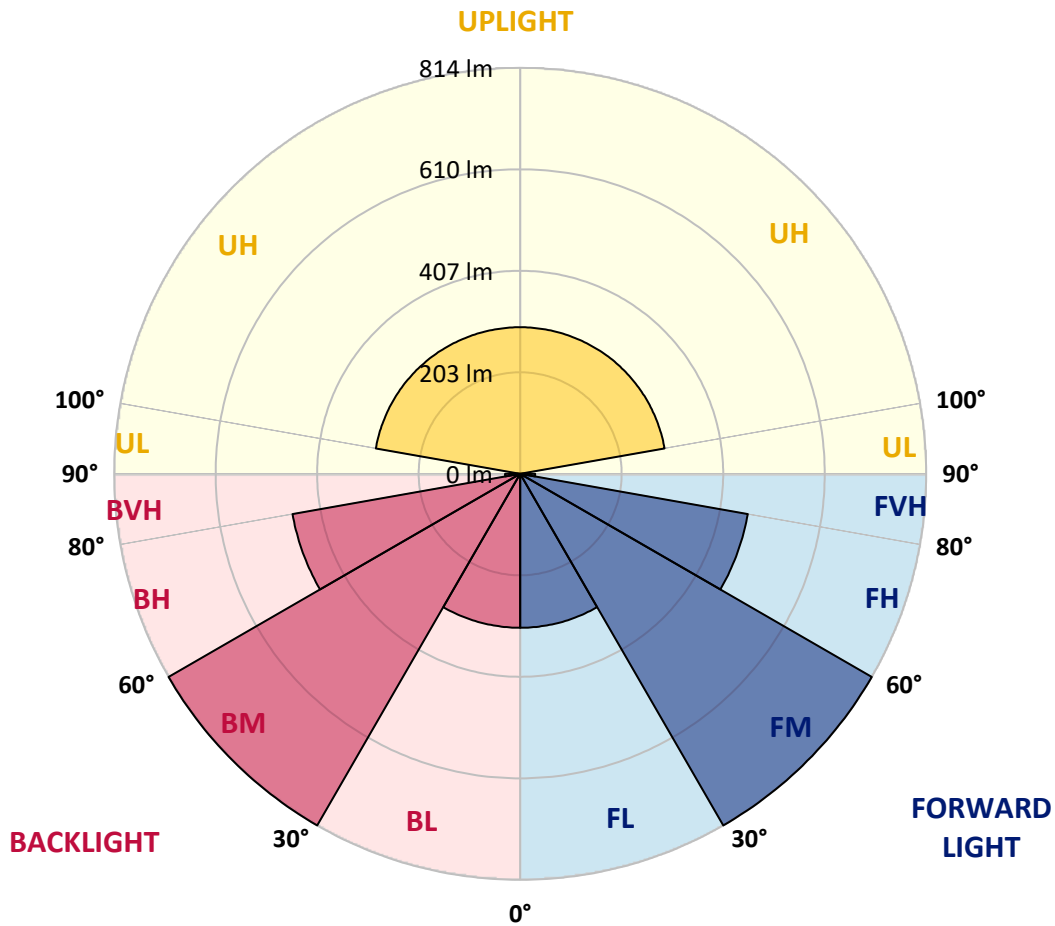
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.5	8.7			
FM (30°-60°)	813.7	23.0			
FH (60°-80°)	463.3	13.1			G0/660
FVH (80°-90°)	30.2	0.9			G1/100
BL (0°-30°)	308.5	8.7	B1/500		
BM (30°-60°)	813.7	23.0	B1/1000		
BH (60°-80°)	463.3	13.1	B1/500		G0/660
BVH (80°-90°)	30.2	0.9			G1/100
UL (90°-100°)	6.7	0.2		U1/10	
UH (100°-180°)	293.8	8.3		U3/500	

BUG Rating: B1-U3-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6	768.6
2.5°	760.8	763.4	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	763.4
5°	763.4	763.4	763.4	763.4	760.8	760.8	760.8	760.8	760.8	763.4	763.4
7.5°	755.5	755.5	755.5	755.5	755.5	752.9	755.5	755.5	755.5	755.5	755.5
10°	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7	747.7
12.5°	742.4	742.4	742.4	742.4	742.4	742.4	742.4	742.4	742.4	739.8	739.8
15°	737.2	737.2	737.2	737.2	739.8	739.8	737.2	737.2	737.2	737.2	737.2
17.5°	731.9	731.9	731.9	731.9	734.5	734.5	734.5	731.9	731.9	731.9	731.9
20°	726.7	726.7	726.7	726.7	729.3	729.3	729.3	729.3	729.3	726.7	726.7
22.5°	724.1	724.1	724.1	724.1	726.7	726.7	726.7	726.7	724.1	724.1	724.1
25°	721.4	724.1	724.1	724.1	726.7	729.3	729.3	726.7	724.1	721.4	721.4
27.5°	724.1	724.1	724.1	726.7	726.7	729.3	729.3	726.7	724.1	724.1	724.1
30°	721.4	721.4	721.4	724.1	726.7	729.3	726.7	726.7	724.1	721.4	721.4
32.5°	716.2	716.2	718.8	721.4	724.1	724.1	724.1	721.4	718.8	716.2	716.2
35°	710.9	710.9	710.9	713.6	718.8	718.8	718.8	716.2	713.6	710.9	708.3
37.5°	703.1	705.7	705.7	710.9	713.6	716.2	713.6	710.9	705.7	703.1	703.1
40°	697.8	697.8	700.4	705.7	710.9	710.9	708.3	705.7	700.4	697.8	697.8
42.5°	689.9	689.9	695.2	700.4	708.3	708.3	705.7	700.4	695.2	689.9	689.9
45°	689.9	689.9	695.2	705.7	710.9	716.2	710.9	705.7	695.2	689.9	687.3
47.5°	692.6	692.6	697.8	710.9	721.4	726.7	718.8	708.3	697.8	692.6	689.9
50°	687.3	689.9	700.4	713.6	726.7	729.3	726.7	710.9	700.4	687.3	687.3
52.5°	689.9	689.9	703.1	724.1	737.2	742.4	737.2	724.1	700.4	687.3	687.3
55°	684.7	682.1	700.4	724.1	745.0	755.5	745.0	724.1	697.8	682.1	679.5
57.5°	661.1	661.1	684.7	708.3	734.5	739.8	731.9	708.3	682.1	661.1	655.8
60°	629.6	632.2	655.8	682.1	705.7	708.3	703.1	682.1	655.8	632.2	624.4
62.5°	595.5	600.8	624.4	650.6	679.5	684.7	676.8	650.6	619.1	603.4	590.3
65°	545.7	553.5	579.8	608.6	640.1	637.5	637.5	606.0	582.4	556.2	543.0
67.5°	490.6	498.4	516.8	556.2	582.4	579.8	577.1	556.2	516.8	498.4	490.6
70°	430.2	435.5	453.8	493.2	516.8	519.4	511.6	490.6	453.8	440.7	427.6
72.5°	359.4	362.0	388.3	419.7	443.4	440.7	438.1	419.7	385.6	372.5	356.8
75°	283.3	285.9	309.6	338.4	356.8	354.2	351.5	338.4	309.6	293.8	280.7
77.5°	212.5	209.9	233.5	254.5	265.0	267.6	262.3	251.8	230.9	217.7	209.9
80°	139.0	136.4	157.4	173.1	181.0	181.0	178.4	170.5	154.8	144.3	139.0
82.5°	78.7	76.1	89.2	99.7	107.6	104.9	102.3	97.1	89.2	81.3	76.1
85°	28.9	28.9	36.7	42.0	47.2	47.2	44.6	42.0	34.1	31.5	28.9
87.5°	2.6	2.6	5.2	7.9	7.9	7.9	5.2	5.2	2.6	2.6	2.6
90°	2.6	2.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.6	2.6
92.5°	2.6	2.6	2.6	3.6	4.1	3.6	4.1	3.1	3.1	2.6	2.6
95°	3.1	3.1	3.6	4.6	5.7	6.2	6.2	3.6	3.6	3.1	3.1
97.5°	4.1	4.6	4.6	5.7	9.3	17.0	10.3	5.1	5.1	4.6	4.1
100°	6.7	7.2	7.2	12.9	27.2	36.5	26.2	13.4	9.8	7.2	7.2
102.5°	21.6	22.6	27.8	41.6	61.7	56.0	47.3	44.7	30.8	24.7	23.6
105°	55.0	54.5	58.6	69.4	86.4	84.8	78.1	70.9	61.2	56.5	56.5
107.5°	72.5	72.5	76.1	85.3	98.2	114.6	116.2	92.0	80.7	75.6	75.0
110°	81.7	81.7	84.8	92.5	109.5	132.6	131.6	113.6	99.7	93.0	92.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.8	84.3	88.4	100.2	118.7	129.0	124.4	117.2	111.0	105.9	104.9
115°	86.9	86.9	91.5	102.8	113.1	117.2	112.1	106.4	102.3	100.2	101.3
117.5°	85.8	87.4	88.4	94.6	101.3	104.4	101.8	94.1	91.0	90.0	88.4
120°	79.7	79.7	80.7	83.8	87.4	88.9	87.9	82.8	80.2	79.7	78.6
122.5°	70.9	71.5	70.9	72.5	75.0	76.6	75.6	71.5	70.4	70.4	69.4
125°	62.2	62.2	61.7	62.7	64.3	63.7	64.3	62.2	61.7	61.7	61.2
127.5°	56.0	55.5	54.5	55.0	55.5	55.5	56.0	54.0	54.5	55.0	54.5
130°	49.9	49.9	48.8	48.8	48.8	47.8	48.8	47.8	48.3	48.8	49.3
132.5°	44.2	44.2	42.7	42.2	42.2	42.2	42.7	42.2	43.2	44.2	44.2
135°	39.6	39.6	38.0	38.6	38.6	38.0	38.6	38.0	39.1	39.6	39.6
137.5°	36.0	36.0	35.0	35.0	35.0	34.4	35.0	35.0	35.5	36.5	37.0
140°	32.9	32.9	32.4	32.4	31.9	32.4	32.4	32.4	32.9	33.4	33.4
142.5°	31.4	30.8	30.3	29.8	30.3	30.3	30.3	29.8	30.3	31.4	31.4
145°	28.8	28.8	28.3	28.3	28.3	28.8	28.3	28.3	28.8	28.8	29.3
147.5°	27.2	27.2	26.7	27.2	27.2	27.2	27.2	26.7	27.2	27.2	27.8
150°	26.7	26.2	25.7	26.2	26.2	25.7	25.7	25.7	25.7	26.2	26.2
152.5°	25.2	25.2	24.7	25.2	24.7	24.7	24.7	24.7	24.7	25.2	25.7
155°	24.2	24.2	23.6	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
157.5°	23.1	23.6	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.6	23.6
160°	22.6	22.6	22.6	22.6	22.1	22.1	22.1	22.6	22.6	22.6	23.1
162.5°	22.1	22.1	22.1	22.1	21.6	21.6	21.6	21.6	22.1	22.1	22.6
165°	22.1	21.6	21.6	21.6	21.1	21.1	21.1	21.1	21.6	22.1	21.6
167.5°	21.1	21.1	21.1	21.1	21.1	20.6	20.6	21.1	21.1	21.1	21.6
170°	21.1	21.1	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	21.1
172.5°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	20.6	20.6	21.1	21.1
175°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	21.1	21.1	21.1	20.6
177.5°	21.1	21.1	21.1	21.1	20.6	21.1	21.1	21.1	21.1	21.1	21.1
180°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1

(END OF REPORT)