

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: P833161

Luminaire Tested: **TTN-D1-735-U-CQ-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833161
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-CQ-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND CONCENTRATED DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3505.9 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U3 - G1

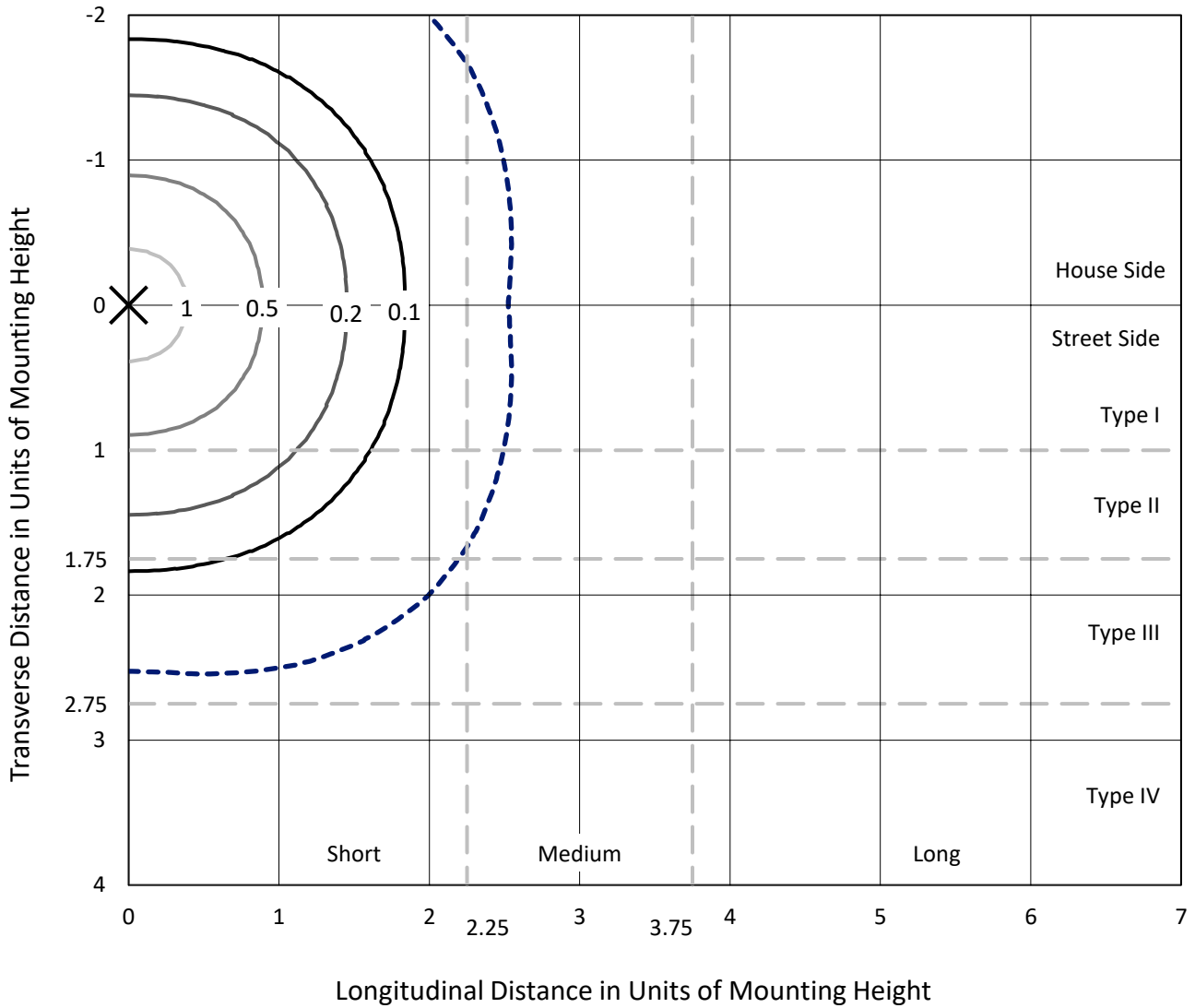
Input Watts (W): 29
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

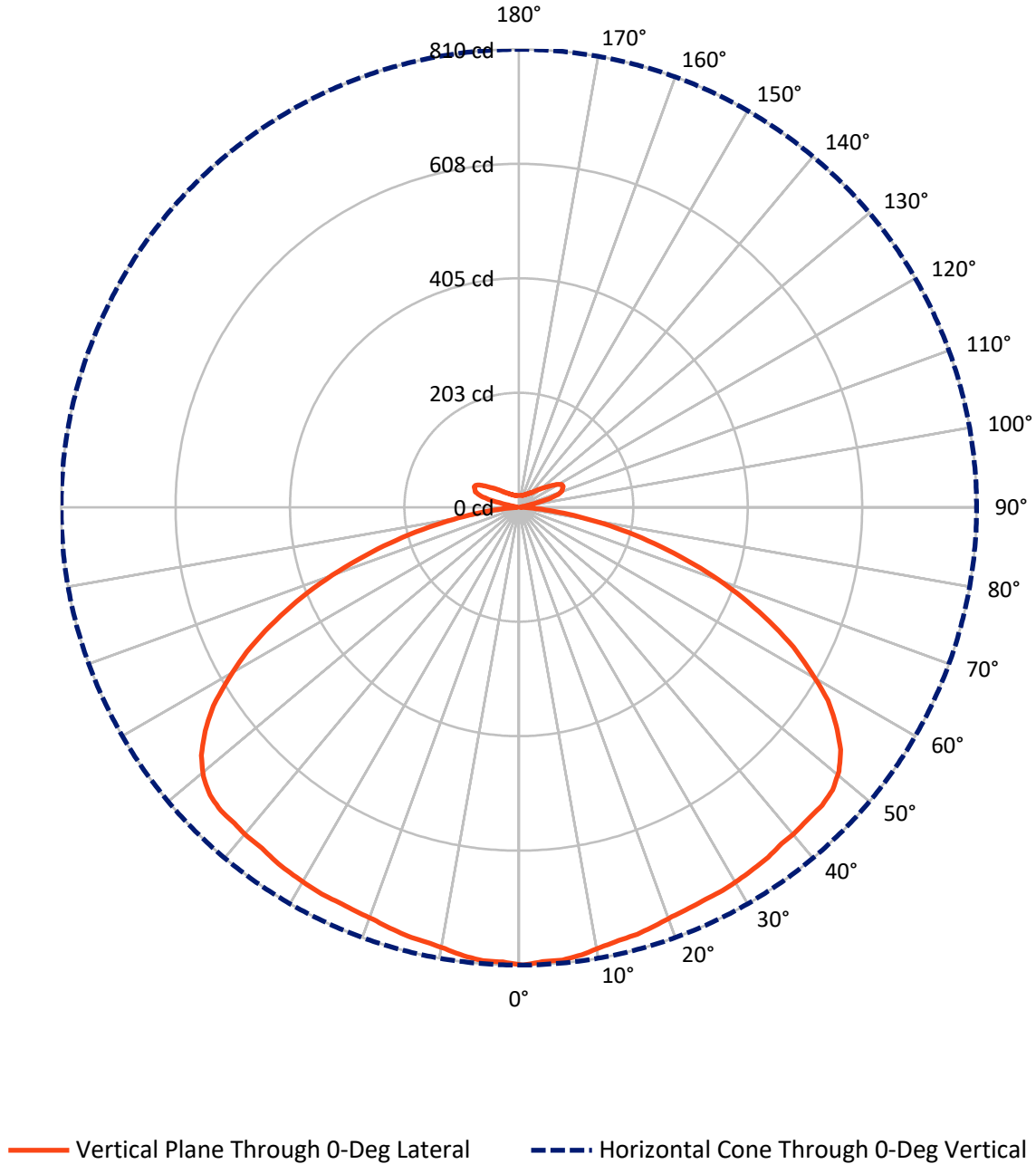
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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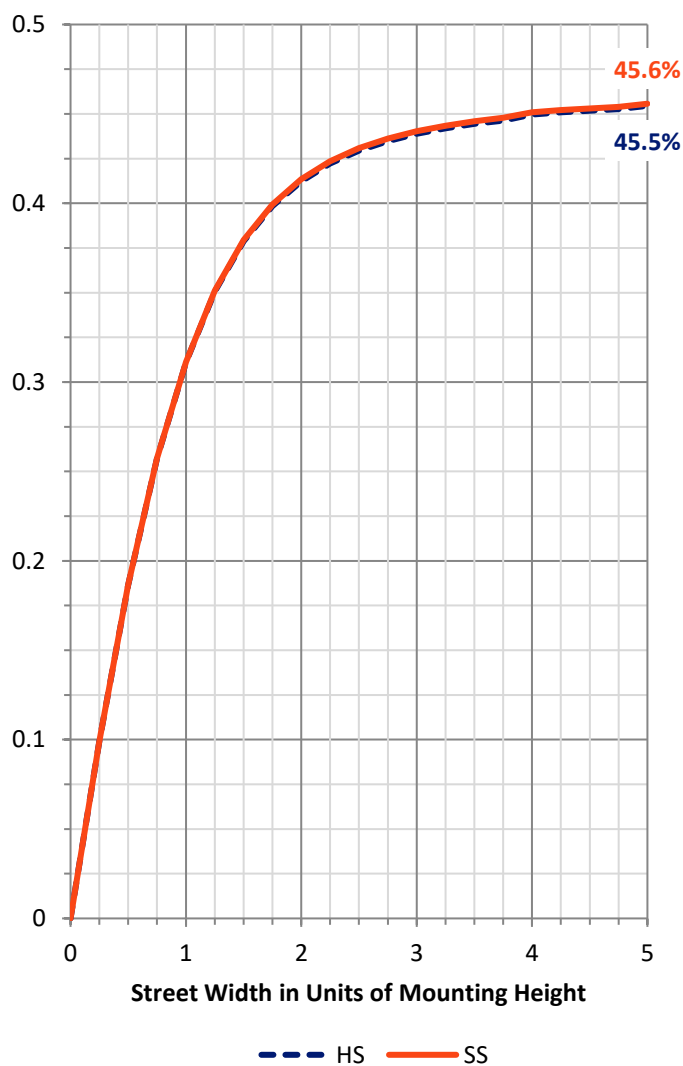
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1602.7	150.2	1753.0
	% Fixture	45.7	4.3	50.0
Street Side	Lumens	1602.7	150.2	1753.0
	% Fixture	45.7	4.3	50.0
Total	Lumens	3205.4	300.5	3505.9
	% Fixture	91.4	8.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	2.2
10°-20°	221.9	6.3
20°-30°	357.3	10.2
30°-40°	480.6	13.7
40°-50°	592.9	16.9
50°-60°	636.1	18.1
60°-70°	515.8	14.7
70°-80°	273.4	7.8
80°-90°	51.0	1.5
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°	3205.4	91.4
0°-180°	3505.9	100.0

Coefficient of Utilization



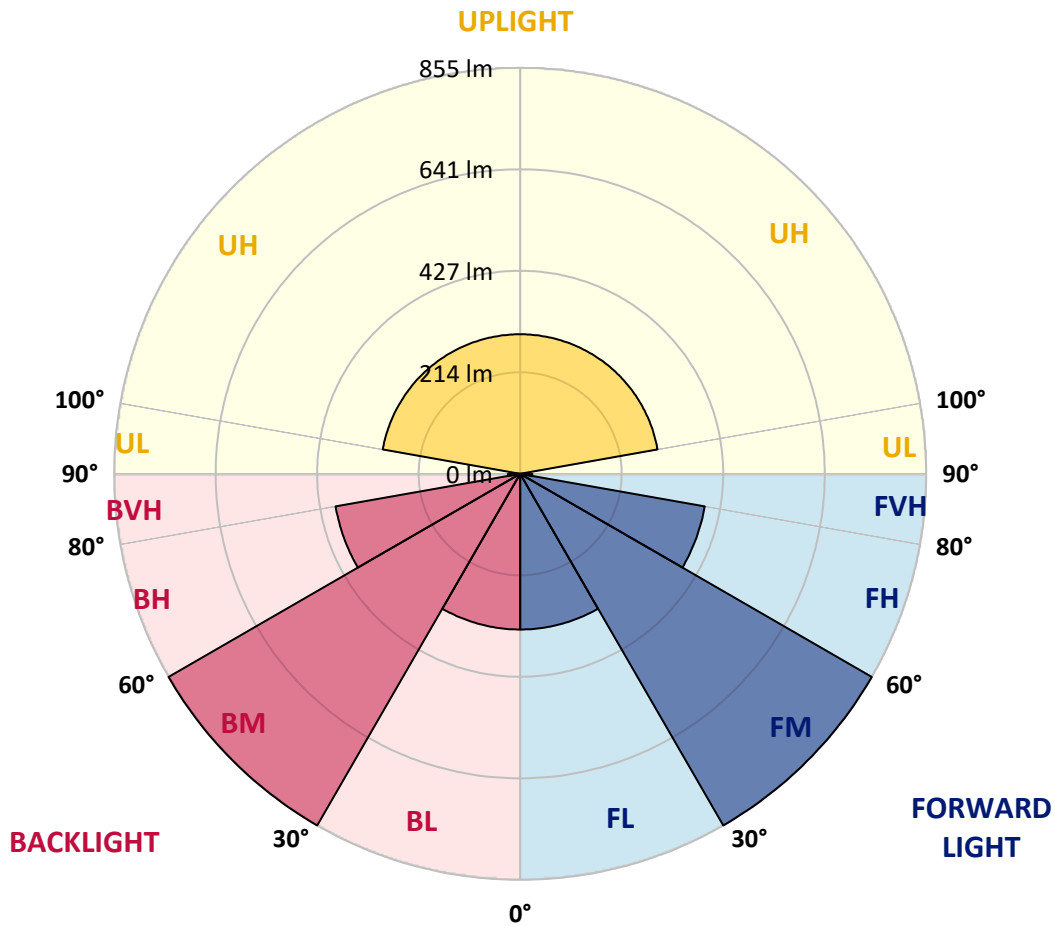
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	327.8	9.3			
FM (30°-60°)	854.8	24.4			
FH (60°-80°)	394.6	11.3			G0/660
FVH (80°-90°)	25.5	0.7			G1/100
BL (0°-30°)	327.8	9.3	B1/500		
BM (30°-60°)	854.8	24.4	B1/1000		
BH (60°-80°)	394.6	11.3	B1/500		G0/660
BVH (80°-90°)	25.5	0.7			G1/100
UL (90°-100°)	6.7	0.2		U1/10	
UH (100°-180°)	293.8	8.4		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°	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4
2.5°	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	805.2	807.8
5°	805.2	805.2	805.2	805.2	802.6	805.2	805.2	805.2	805.2	805.2	805.2
7.5°	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9	799.9
10°	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1	792.1
12.5°	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8	786.8
15°	784.2	784.2	784.2	784.2	784.2	784.2	784.2	784.2	784.2	781.6	781.6
17.5°	779.0	779.0	779.0	779.0	781.6	781.6	781.6	779.0	779.0	779.0	779.0
20°	773.7	773.7	773.7	776.3	776.3	776.3	776.3	776.3	773.7	773.7	773.7
22.5°	771.1	771.1	771.1	771.1	773.7	773.7	773.7	773.7	771.1	771.1	771.1
25°	768.5	768.5	771.1	771.1	773.7	773.7	773.7	771.1	771.1	768.5	768.5
27.5°	768.5	768.5	771.1	771.1	773.7	773.7	773.7	773.7	771.1	768.5	768.5
30°	765.8	768.5	768.5	771.1	773.7	773.7	773.7	771.1	768.5	765.8	765.8
32.5°	763.2	763.2	765.8	768.5	771.1	771.1	771.1	768.5	765.8	763.2	760.6
35°	760.6	760.6	760.6	765.8	768.5	768.5	768.5	765.8	760.6	758.0	758.0
37.5°	755.4	758.0	760.6	763.2	768.5	768.5	768.5	763.2	758.0	755.4	752.7
40°	755.4	755.4	760.6	763.2	771.1	771.1	768.5	763.2	758.0	752.7	750.1
42.5°	752.7	755.4	760.6	768.5	776.3	776.3	773.7	765.8	758.0	752.7	750.1
45°	752.7	752.7	760.6	771.1	781.6	784.2	779.0	771.1	760.6	750.1	750.1
47.5°	747.5	747.5	758.0	771.1	784.2	786.8	784.2	771.1	758.0	750.1	747.5
50°	734.4	734.4	747.5	763.2	779.0	784.2	779.0	768.5	750.1	739.6	737.0
52.5°	713.4	713.4	726.5	747.5	763.2	771.1	765.8	752.7	734.4	718.6	716.0
55°	681.9	684.5	697.7	721.3	739.6	747.5	742.2	726.5	705.5	689.8	684.5
57.5°	645.2	645.2	663.6	687.2	705.5	713.4	708.1	692.4	668.8	653.1	647.8
60°	595.4	598.0	613.7	645.2	663.6	671.4	666.2	647.8	621.6	603.2	598.0
62.5°	545.5	548.2	563.9	590.1	611.1	616.3	611.1	592.7	569.1	550.8	545.5
65°	487.8	490.5	508.8	532.4	548.2	556.0	548.2	532.4	511.4	493.1	490.5
67.5°	427.5	430.1	448.5	469.5	485.2	490.5	482.6	469.5	448.5	432.8	427.5
70°	364.6	367.2	382.9	401.3	414.4	419.6	414.4	398.7	382.9	367.2	364.6
72.5°	299.0	301.6	317.4	333.1	343.6	348.8	341.0	330.5	314.7	301.6	299.0
75°	236.0	236.0	249.2	262.3	272.8	275.4	270.1	262.3	249.2	238.7	233.4
77.5°	175.7	175.7	188.8	196.7	202.0	207.2	202.0	194.1	186.2	175.7	175.7
80°	118.0	118.0	128.5	133.8	139.0	141.6	139.0	133.8	128.5	120.6	118.0
82.5°	70.8	70.8	76.1	81.3	81.3	83.9	83.9	81.3	76.1	70.8	70.8
85°	31.5	28.9	34.1	36.7	36.7	39.3	39.3	36.7	34.1	31.5	31.5
87.5°	2.6	5.2	5.2	7.9	7.9	7.9	7.9	7.9	5.2	5.2	5.2
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)