

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: P833162

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833162
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-UPL2
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: 3748.8 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U4 - G1

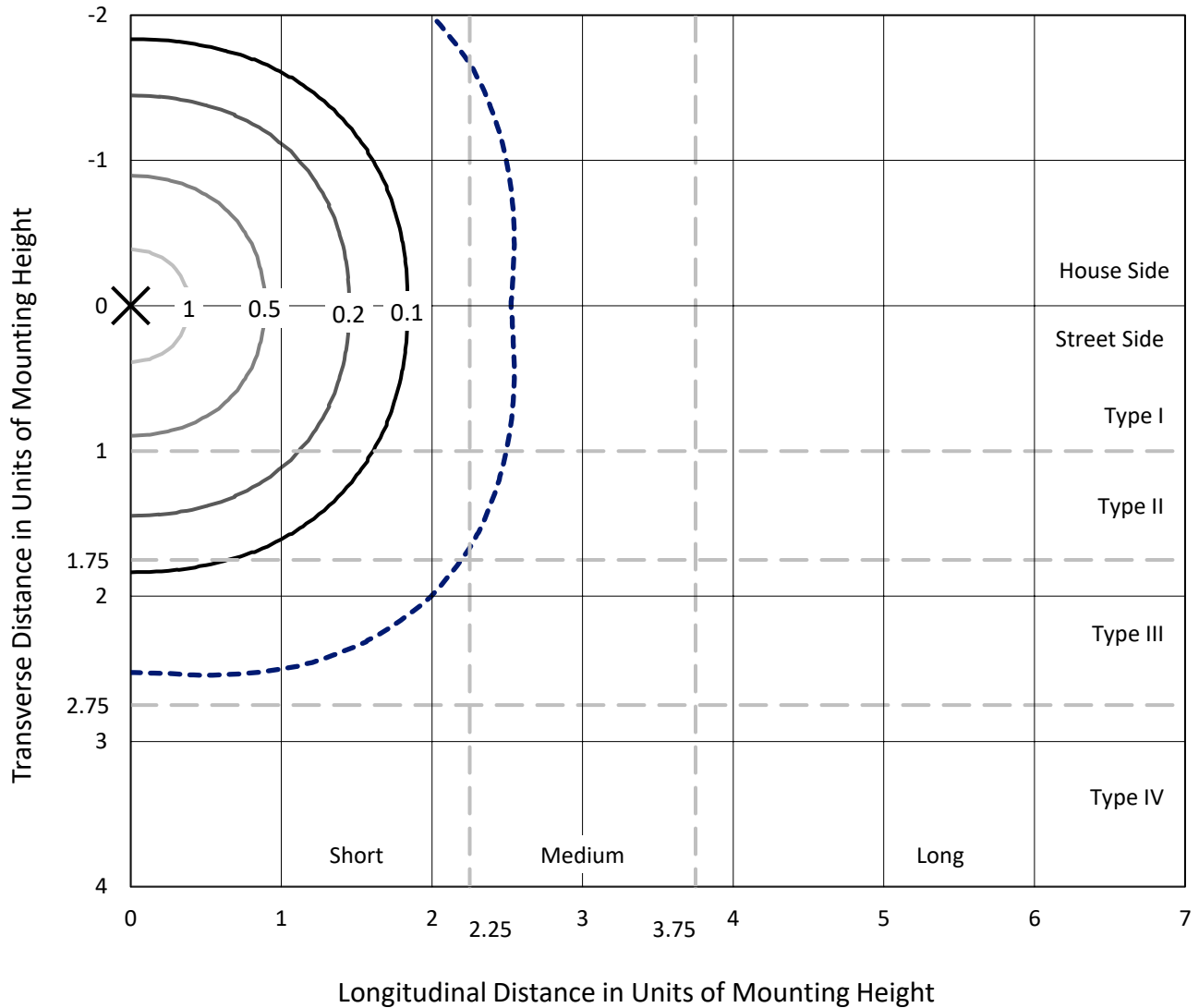
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

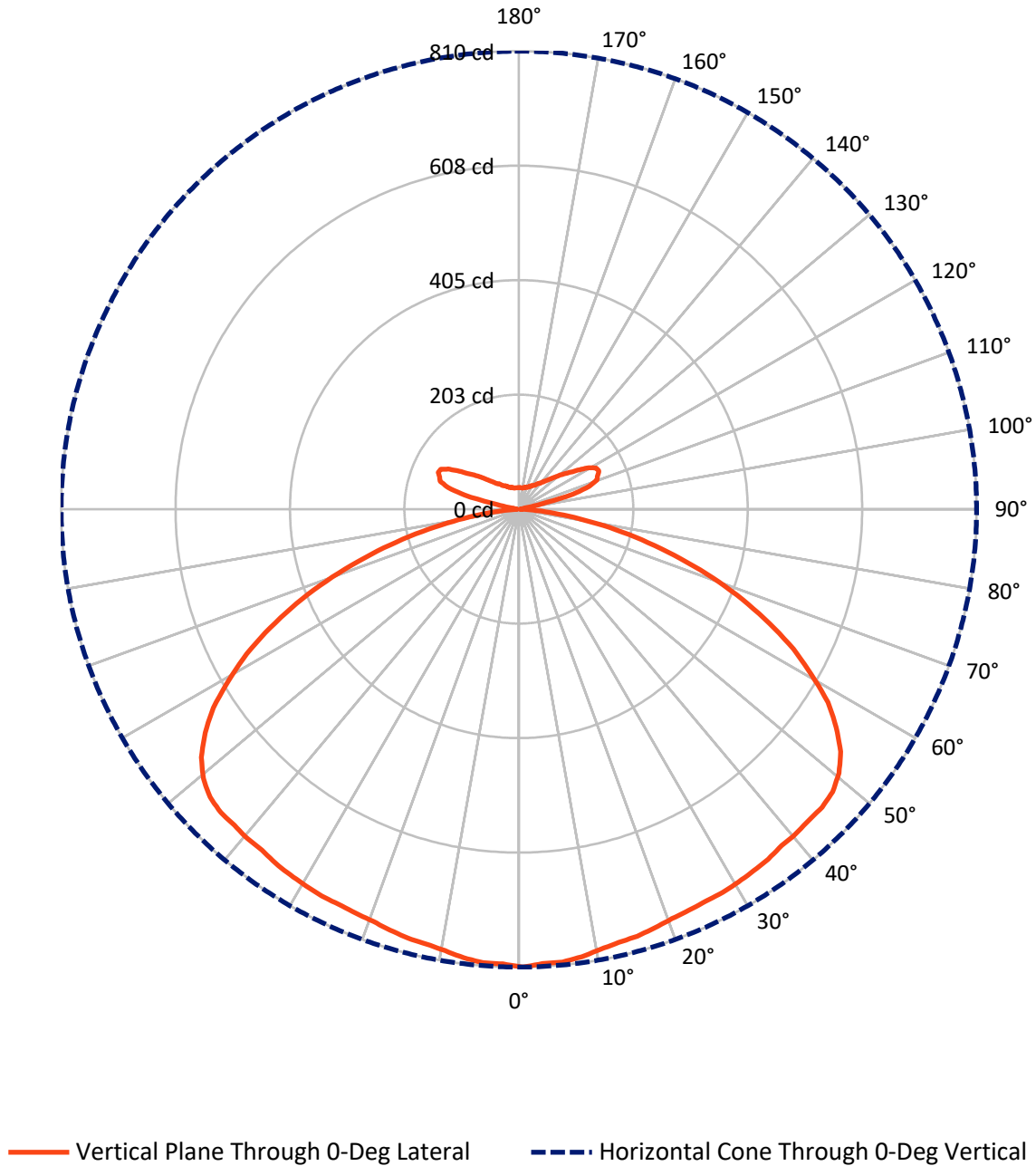
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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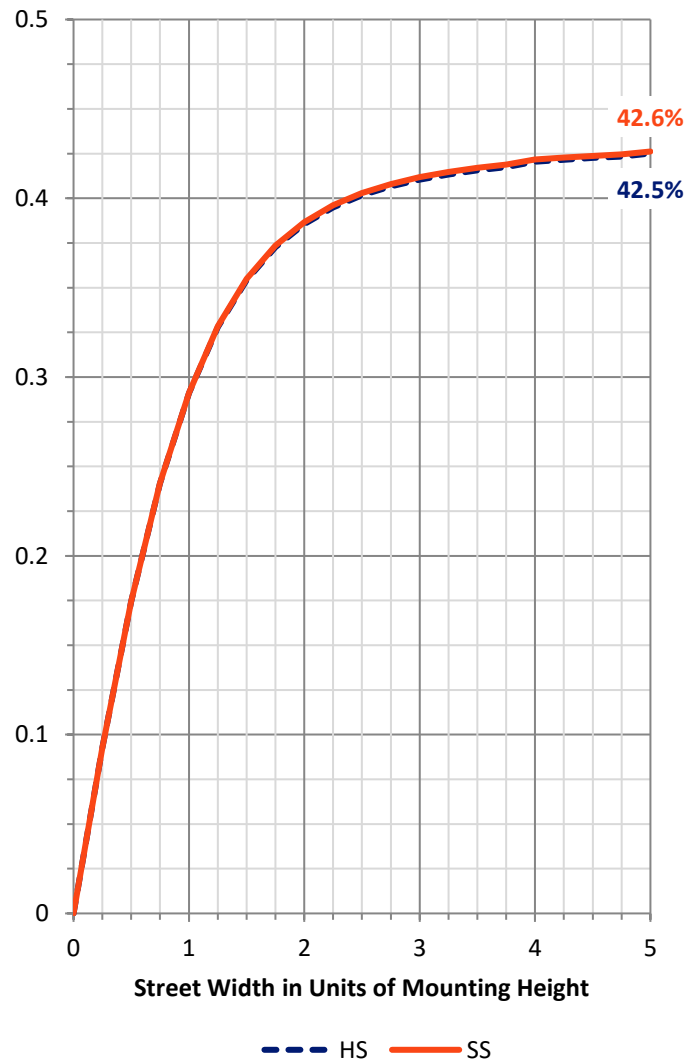
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1602.9	271.5	1874.4
	% Fixture	42.8	7.2	50.0
Street Side	Lumens	1602.9	271.5	1874.4
	% Fixture	42.8	7.2	50.0
Total	Lumens	3205.8	543.0	3748.8
	% Fixture	85.5	14.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	2.0
10°-20°	221.9	5.9
20°-30°	357.3	9.5
30°-40°	480.6	12.8
40°-50°	592.9	15.8
50°-60°	636.1	17.0
60°-70°	515.8	13.8
70°-80°	273.4	7.3
80°-90°	51.3	1.4
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°	3205.8	85.5
0°-180°	3748.8	100.0

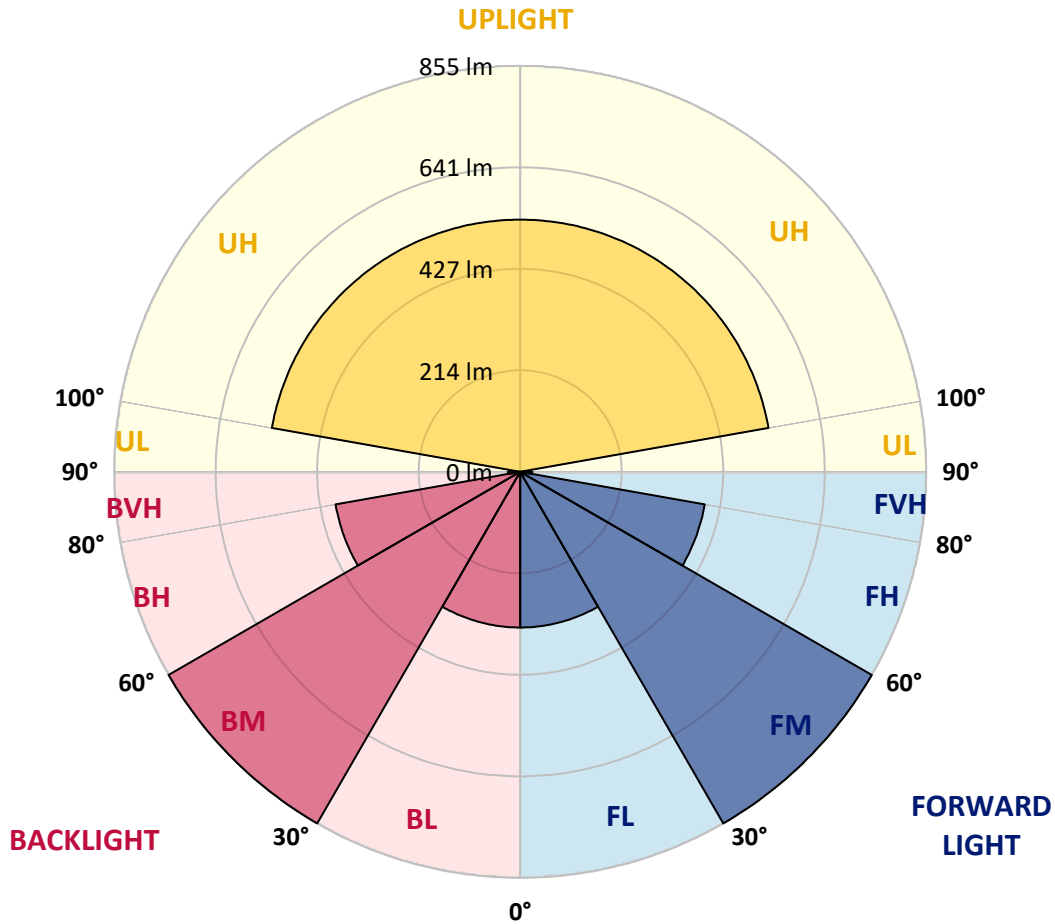


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	327.8	8.7			
FM (30°-60°)	854.8	22.8			
FH (60°-80°)	394.6	10.5			G0/660
FVH (80°-90°)	25.6	0.7			G1/100
BL (0°-30°)	327.8	8.7	B1/500		
BM (30°-60°)	854.8	22.8	B1/1000		
BH (60°-80°)	394.6	10.5	B1/500		G0/660
BVH (80°-90°)	25.6	0.7			G1/100
UL (90°-100°)	12.1	0.3		U2/50	
UH (100°-180°)	530.9	14.2		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°	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°	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)