

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: P833174

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833174
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-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.8 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

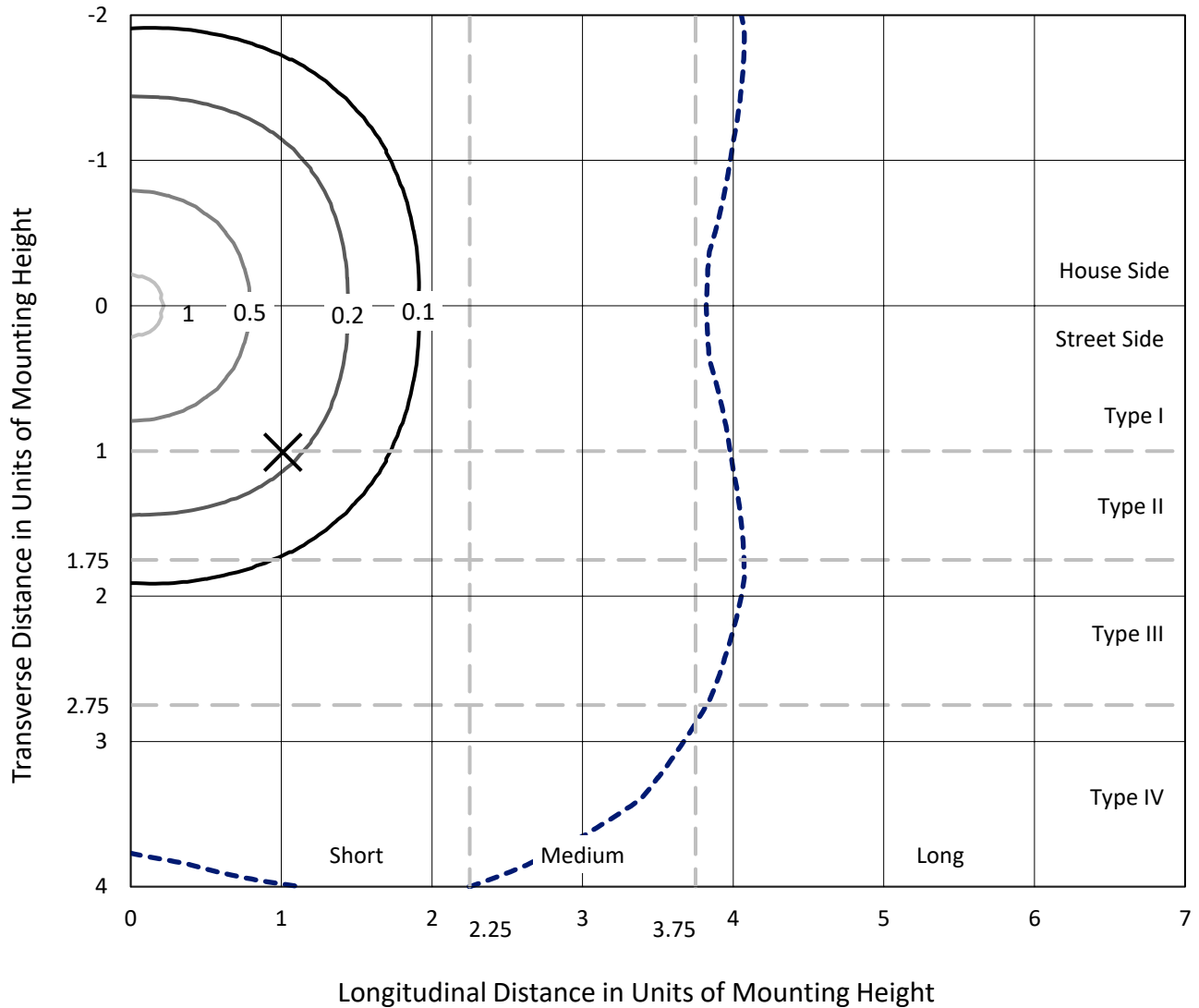
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

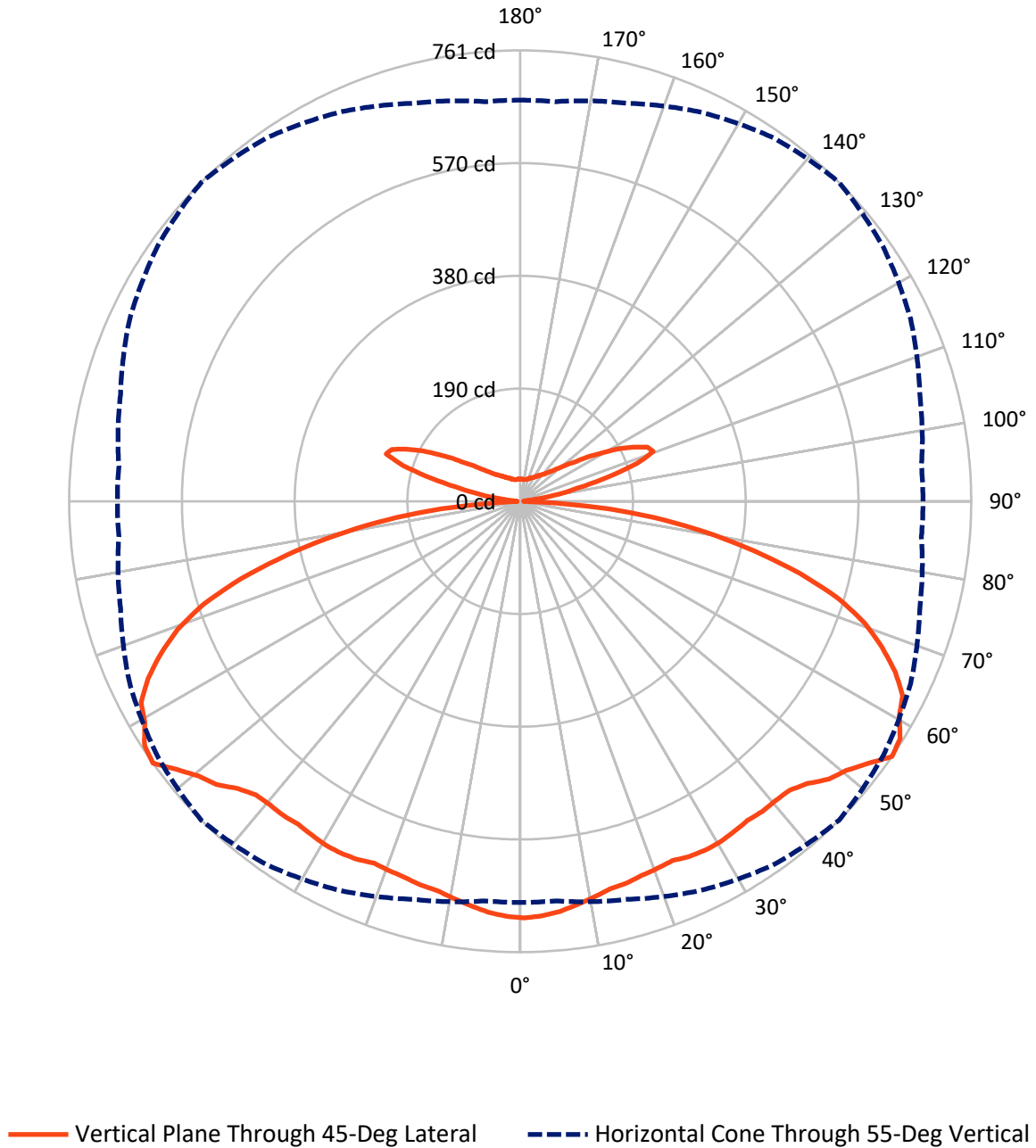
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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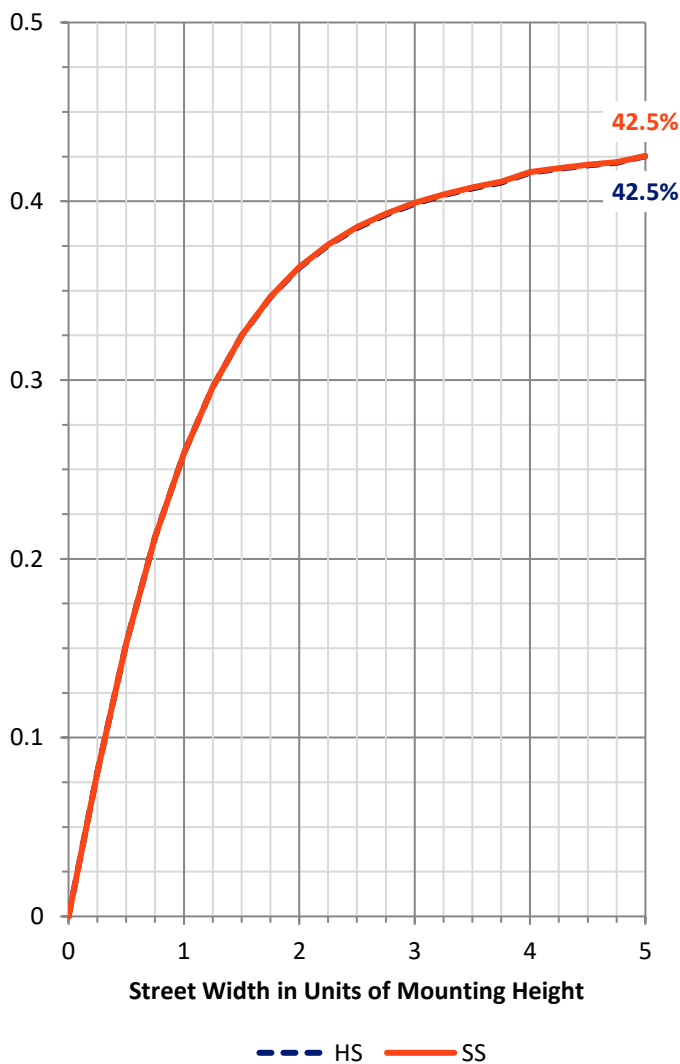
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1670.9	271.5	1942.4
	% Fixture	43.0	7.0	50.0
Street Side	Lumens	1670.9	271.5	1942.4
	% Fixture	43.0	7.0	50.0
Total	Lumens	3341.7	543.0	3884.8
	% Fixture	86.0	14.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.7
10°-20°	188.9	4.9
20°-30°	305.3	7.9
30°-40°	413.1	10.6
40°-50°	517.4	13.3
50°-60°	634.1	16.3
60°-70°	635.6	16.4
70°-80°	458.7	11.8
80°-90°	123.0	3.2
90°-100°	12.1	0.3
100°-110°	123.2	3.2
110°-120°	180.1	4.6
120°-130°	104.5	2.7
130°-140°	55.4	1.4
140°-150°	32.9	0.8
150°-160°	20.2	0.5
160°-170°	11.0	0.3
170°-180°	3.6	0.1
0°-90°	3341.7	86.0
0°-180°	3884.8	100.0

Coefficient of Utilization



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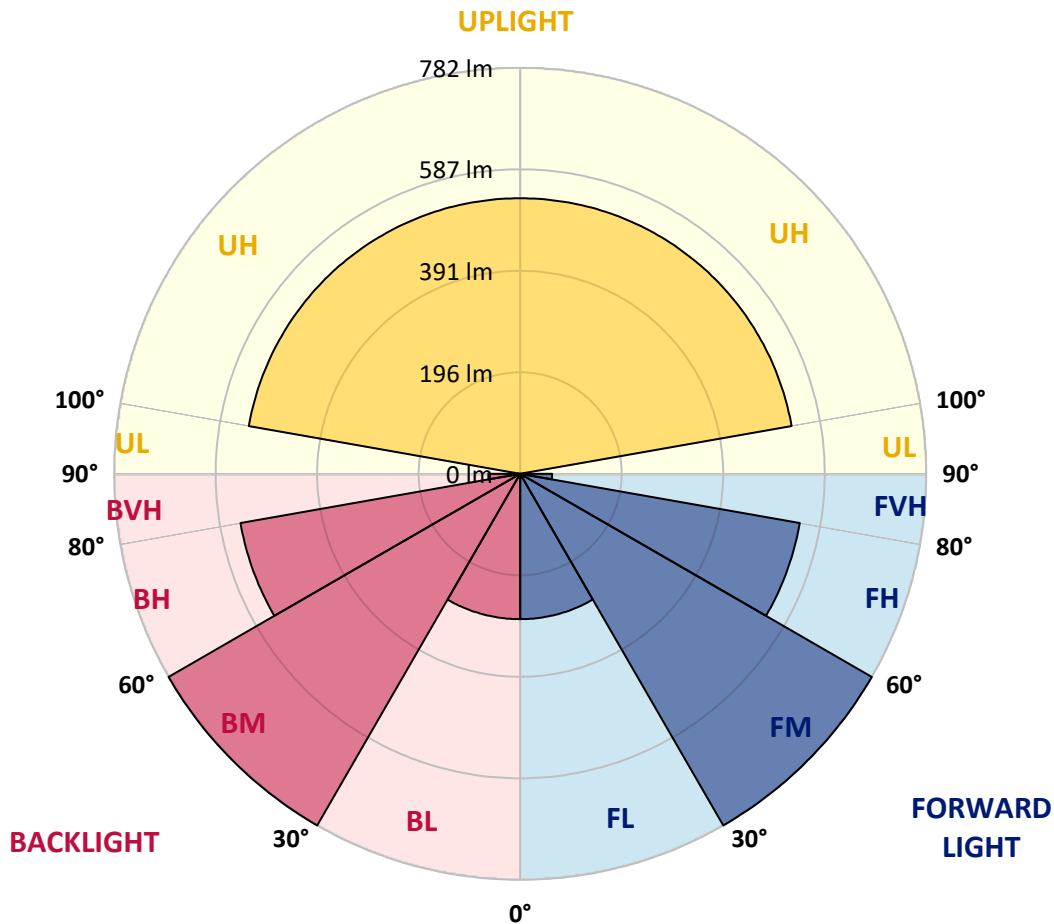
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	280.0	7.2			
FM (30°-60°)	782.3	20.1			
FH (60°-80°)	547.1	14.1			G0/660
FVH (80°-90°)	61.5	1.6			G1/100
BL (0°-30°)	280.0	7.2	B1/500		
BM (30°-60°)	782.3	20.1	B1/1000		
BH (60°-80°)	547.1	14.1	B2/1000		G0/660
BVH (80°-90°)	61.5	1.6			G1/100
UL (90°-100°)	12.1	0.3		U2/50	
UH (100°-180°)	530.9	13.7		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°	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9
2.5°	700.3	700.3	700.3	697.7	700.3	700.3	700.3	700.3	700.3	700.3	700.3
5°	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1
7.5°	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2
10°	676.7	676.7	676.7	676.7	679.3	679.3	679.3	679.3	676.7	676.7	676.7
12.5°	668.8	668.8	668.8	671.4	671.4	671.4	671.4	671.4	671.4	671.4	668.8
15°	666.2	666.2	666.2	666.2	668.8	668.8	668.8	668.8	666.2	666.2	666.2
17.5°	661.0	661.0	661.0	663.6	663.6	663.6	663.6	663.6	661.0	661.0	661.0
20°	655.7	655.7	658.3	658.3	661.0	661.0	661.0	658.3	658.3	655.7	658.3
22.5°	655.7	655.7	655.7	658.3	658.3	658.3	658.3	655.7	655.7	655.7	655.7
25°	655.7	655.7	658.3	661.0	661.0	663.6	661.0	658.3	655.7	655.7	655.7
27.5°	658.3	658.3	661.0	663.6	663.6	666.2	663.6	661.0	658.3	658.3	658.3
30°	658.3	658.3	661.0	663.6	663.6	666.2	663.6	661.0	658.3	658.3	658.3
32.5°	653.1	655.7	658.3	661.0	663.6	663.6	663.6	661.0	658.3	655.7	655.7
35°	650.5	653.1	655.7	658.3	661.0	661.0	661.0	658.3	655.7	653.1	653.1
37.5°	647.8	647.8	653.1	655.7	658.3	663.6	661.0	655.7	653.1	650.5	650.5
40°	645.2	647.8	650.5	655.7	658.3	663.6	661.0	655.7	650.5	647.8	647.8
42.5°	645.2	645.2	650.5	655.7	661.0	666.2	663.6	658.3	650.5	647.8	645.2
45°	647.8	650.5	658.3	668.8	674.1	679.3	676.7	668.8	655.7	650.5	647.8
47.5°	658.3	661.0	668.8	679.3	692.4	700.3	692.4	679.3	668.8	661.0	658.3
50°	663.6	666.2	679.3	692.4	710.8	713.4	710.8	692.4	679.3	666.2	666.2
52.5°	674.1	674.1	689.8	713.4	729.1	734.4	729.1	716.0	689.8	676.7	674.1
55°	676.7	676.7	695.1	723.9	747.5	760.6	747.5	726.5	697.7	679.3	679.3
57.5°	661.0	666.2	689.8	718.7	747.5	755.4	747.5	721.3	692.4	668.8	666.2
60°	642.6	650.5	671.4	705.5	726.5	734.4	729.1	705.5	674.1	650.5	647.8
62.5°	624.2	634.7	658.3	684.6	716.0	723.9	716.0	684.6	658.3	634.7	624.2
65°	584.9	595.4	629.5	661.0	689.8	695.1	692.4	661.0	629.5	595.4	590.1
67.5°	545.6	553.4	577.0	626.9	650.5	658.3	653.1	624.2	579.6	553.4	550.8
70°	503.6	511.5	532.4	579.6	603.3	616.4	605.9	579.6	532.4	511.5	508.8
72.5°	448.5	459.0	482.6	524.6	548.2	561.3	550.8	524.6	482.6	456.4	451.1
75°	382.9	390.8	419.7	453.8	477.4	487.8	480.0	456.4	419.7	390.8	388.2
77.5°	312.1	320.0	346.2	380.3	393.4	403.9	396.0	377.7	346.2	320.0	317.4
80°	236.1	243.9	267.5	293.8	306.9	317.4	309.5	291.1	267.5	243.9	241.3
82.5°	154.7	162.6	183.6	204.6	217.7	228.2	220.3	202.0	186.2	162.6	160.0
85°	65.6	73.4	91.8	112.8	123.3	133.8	125.9	110.2	91.8	76.1	73.4
87.5°	5.2	7.9	7.9	10.5	7.9	13.1	7.9	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)