

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: P833321

Luminaire Tested: **TTN-D1-830-U-MQ-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833321
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-D1-830-U-MQ-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3588.8 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U4 - G1

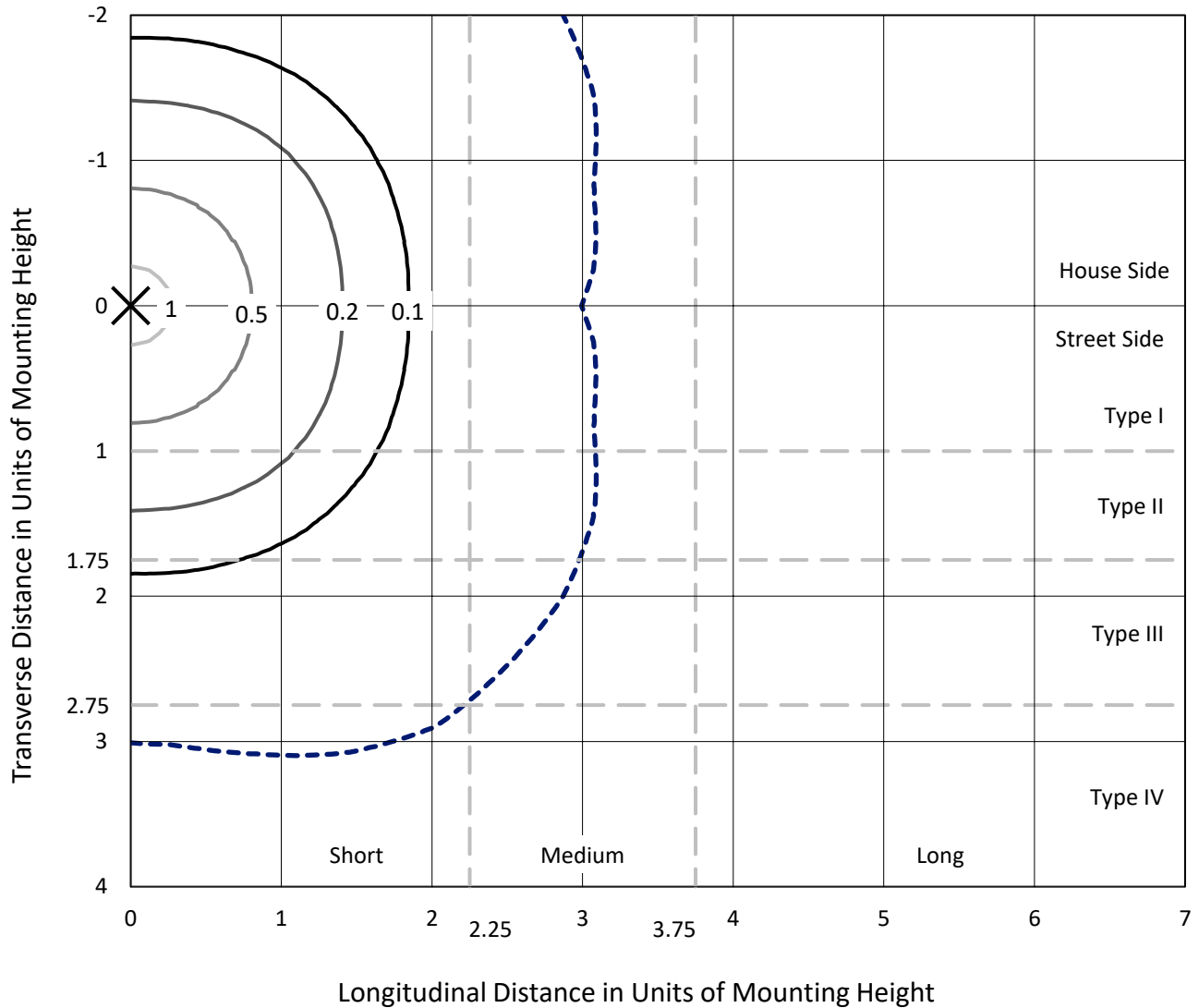
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

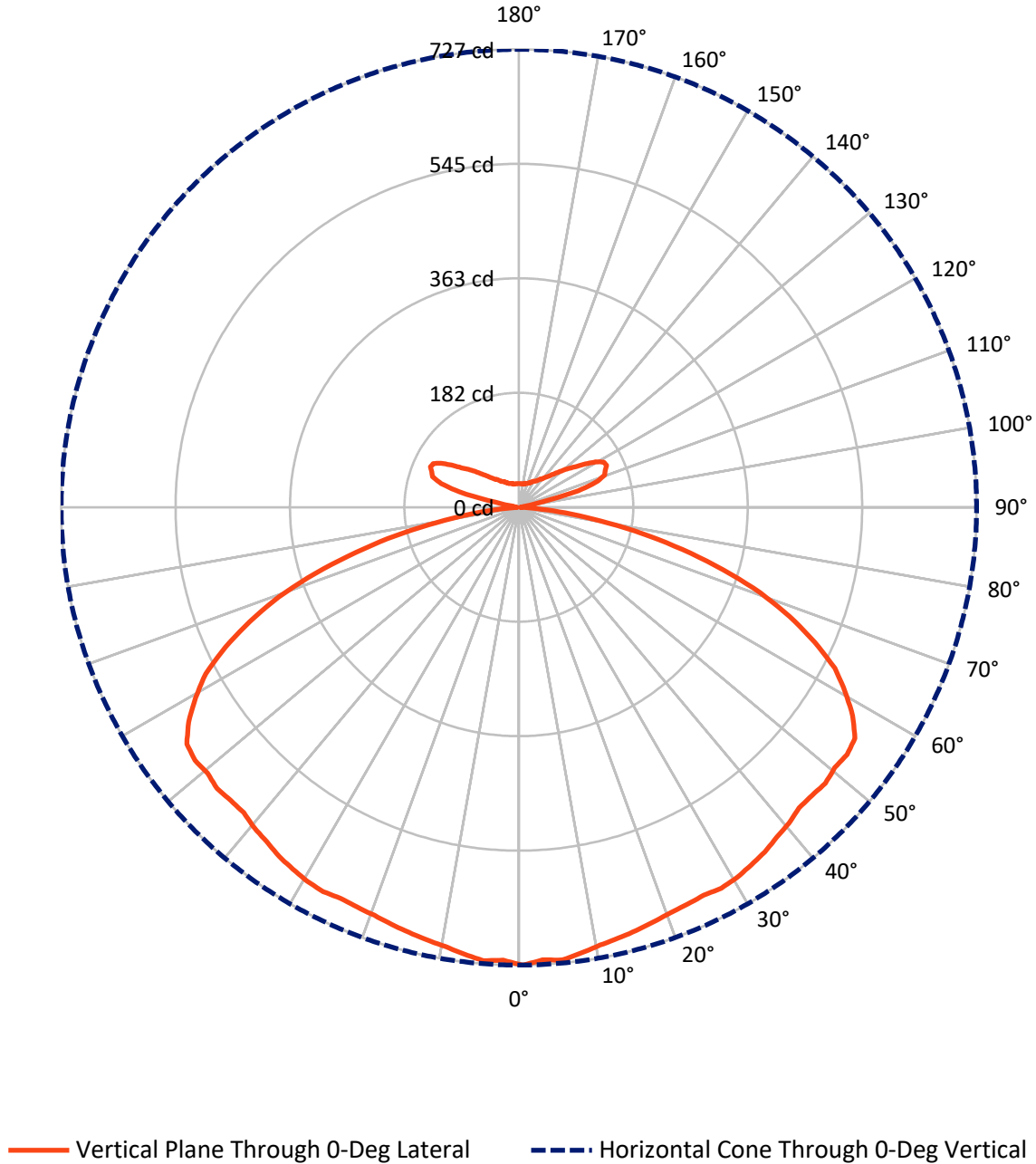
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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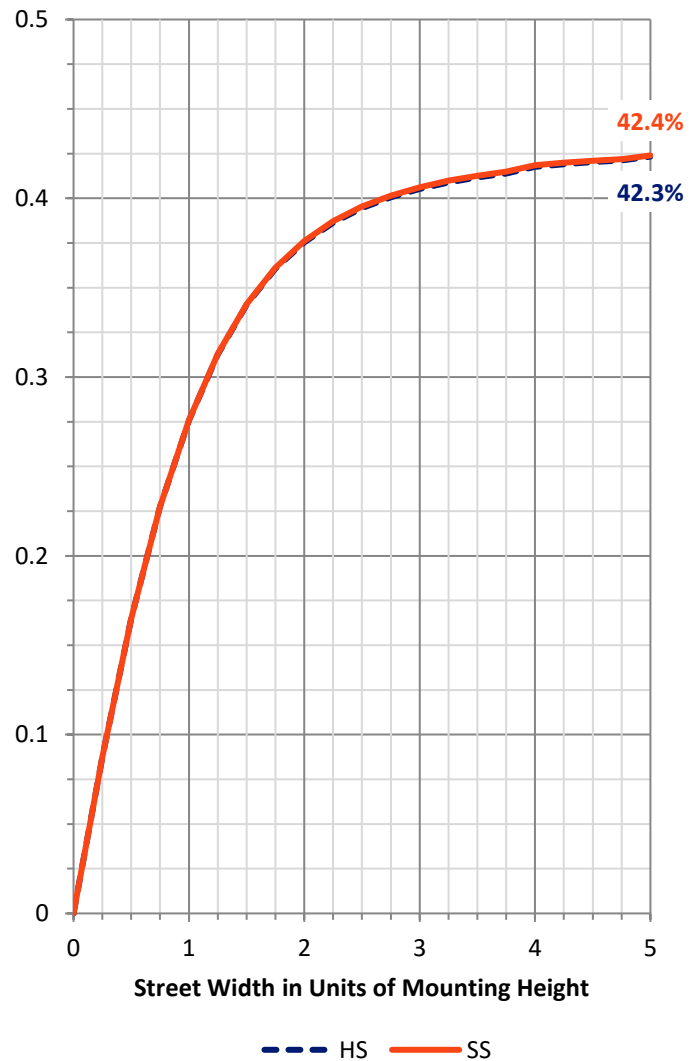
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1527.4	267.0	1794.4
	% Fixture	42.6	7.4	50.0
Street Side	Lumens	1527.4	267.0	1794.4
	% Fixture	42.6	7.4	50.0
Total	Lumens	3054.7	534.0	3588.8
	% Fixture	85.1	14.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	1.9
10°-20°	197.4	5.5
20°-30°	317.5	8.8
30°-40°	424.2	11.8
40°-50°	515.4	14.4
50°-60°	598.8	16.7
60°-70°	552.5	15.4
70°-80°	323.4	9.0
80°-90°	57.4	1.6
90°-100°	11.9	0.3
100°-110°	121.1	3.4
110°-120°	177.1	4.9
120°-130°	102.8	2.9
130°-140°	54.4	1.5
140°-150°	32.3	0.9
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	3054.7	85.1
0°-180°	3588.8	100.0

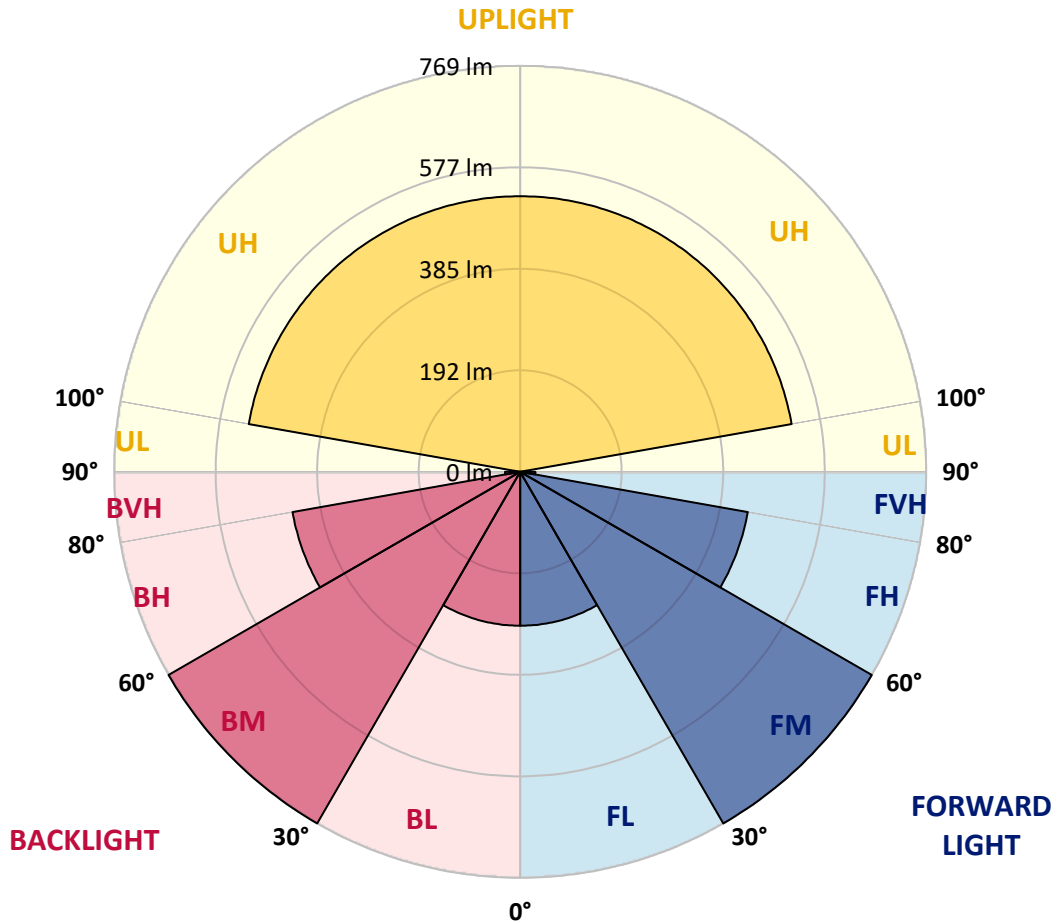


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	291.6	8.1			
FM (30°-60°)	769.2	21.4			
FH (60°-80°)	437.9	12.2			G0/660
FVH (80°-90°)	28.7	0.8			G1/100
BL (0°-30°)	291.6	8.1	B1/500		
BM (30°-60°)	769.2	21.4	B1/1000		
BH (60°-80°)	437.9	12.2	B1/500		G0/660
BVH (80°-90°)	28.7	0.8			G1/100
UL (90°-100°)	11.9	0.3		U2/50	
UH (100°-180°)	522.1	14.5		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°	726.5	726.5	726.5	726.5	726.5	726.5	726.5	726.5	726.5	726.5	726.5
2.5°	719.1	721.6	719.1	719.1	719.1	719.1	719.1	719.1	719.1	719.1	721.6
5°	721.6	721.6	721.6	721.6	719.1	719.1	719.1	719.1	719.1	721.6	721.6
7.5°	714.1	714.1	714.1	714.1	714.1	711.7	714.1	714.1	714.1	714.1	714.1
10°	706.7	706.7	706.7	706.7	706.7	706.7	706.7	706.7	706.7	706.7	706.7
12.5°	701.7	701.7	701.7	701.7	701.7	701.7	701.7	701.7	701.7	699.3	699.3
15°	696.8	696.8	696.8	696.8	699.3	699.3	696.8	696.8	696.8	696.8	696.8
17.5°	691.8	691.8	691.8	691.8	694.3	694.3	694.3	691.8	691.8	691.8	691.8
20°	686.9	686.9	686.9	686.9	689.3	689.3	689.3	689.3	689.3	686.9	686.9
22.5°	684.4	684.4	684.4	684.4	686.9	686.9	686.9	686.9	684.4	684.4	684.4
25°	681.9	684.4	684.4	684.4	686.9	689.3	689.3	686.9	684.4	681.9	681.9
27.5°	684.4	684.4	684.4	686.9	686.9	689.3	689.3	686.9	684.4	684.4	684.4
30°	681.9	681.9	681.9	684.4	686.9	689.3	686.9	686.9	684.4	681.9	681.9
32.5°	676.9	676.9	679.4	681.9	684.4	684.4	684.4	681.9	679.4	676.9	676.9
35°	672.0	672.0	672.0	674.5	679.4	679.4	679.4	676.9	674.5	672.0	669.5
37.5°	664.5	667.0	667.0	672.0	674.5	676.9	674.5	672.0	667.0	664.5	664.5
40°	659.6	659.6	662.1	667.0	672.0	672.0	669.5	667.0	662.1	659.6	659.6
42.5°	652.2	652.2	657.1	662.1	669.5	669.5	667.0	662.1	657.1	652.2	652.2
45°	652.2	652.2	657.1	667.0	672.0	676.9	672.0	667.0	657.1	652.2	649.7
47.5°	654.6	654.6	659.6	672.0	681.9	686.9	679.4	669.5	659.6	654.6	652.2
50°	649.7	652.2	662.1	674.5	686.9	689.3	686.9	672.0	662.1	649.7	649.7
52.5°	652.2	652.2	664.5	684.4	696.8	701.7	696.8	684.4	662.1	649.7	649.7
55°	647.2	644.7	662.1	684.4	704.2	714.1	704.2	684.4	659.6	644.7	642.2
57.5°	624.9	624.9	647.2	669.5	694.3	699.3	691.8	669.5	644.7	624.9	619.9
60°	595.1	597.6	619.9	644.7	667.0	669.5	664.5	644.7	619.9	597.6	590.2
62.5°	562.9	567.8	590.2	615.0	642.2	647.2	639.8	615.0	585.2	570.3	557.9
65°	515.8	523.2	548.0	575.3	605.0	602.6	602.6	572.8	550.5	525.7	513.3
67.5°	463.7	471.1	488.5	525.7	550.5	548.0	545.5	525.7	488.5	471.1	463.7
70°	406.7	411.6	429.0	466.2	488.5	491.0	483.5	463.7	429.0	416.6	404.2
72.5°	339.7	342.2	367.0	396.7	419.1	416.6	414.1	396.7	364.5	352.1	337.2
75°	267.8	270.3	292.6	319.9	337.2	334.8	332.3	319.9	292.6	277.7	265.3
77.5°	200.9	198.4	220.7	240.5	250.4	252.9	248.0	238.0	218.2	205.8	198.4
80°	131.4	128.9	148.8	163.7	171.1	171.1	168.6	161.2	146.3	136.4	131.4
82.5°	74.4	71.9	84.3	94.2	101.7	99.2	96.7	91.7	84.3	76.9	71.9
85°	27.3	27.3	34.7	39.7	44.6	44.6	42.2	39.7	32.2	29.8	27.3
87.5°	2.5	2.5	5.0	7.4	7.4	7.4	5.0	5.0	2.5	2.5	2.5
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)