

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: P833324

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833324
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-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3692.8 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

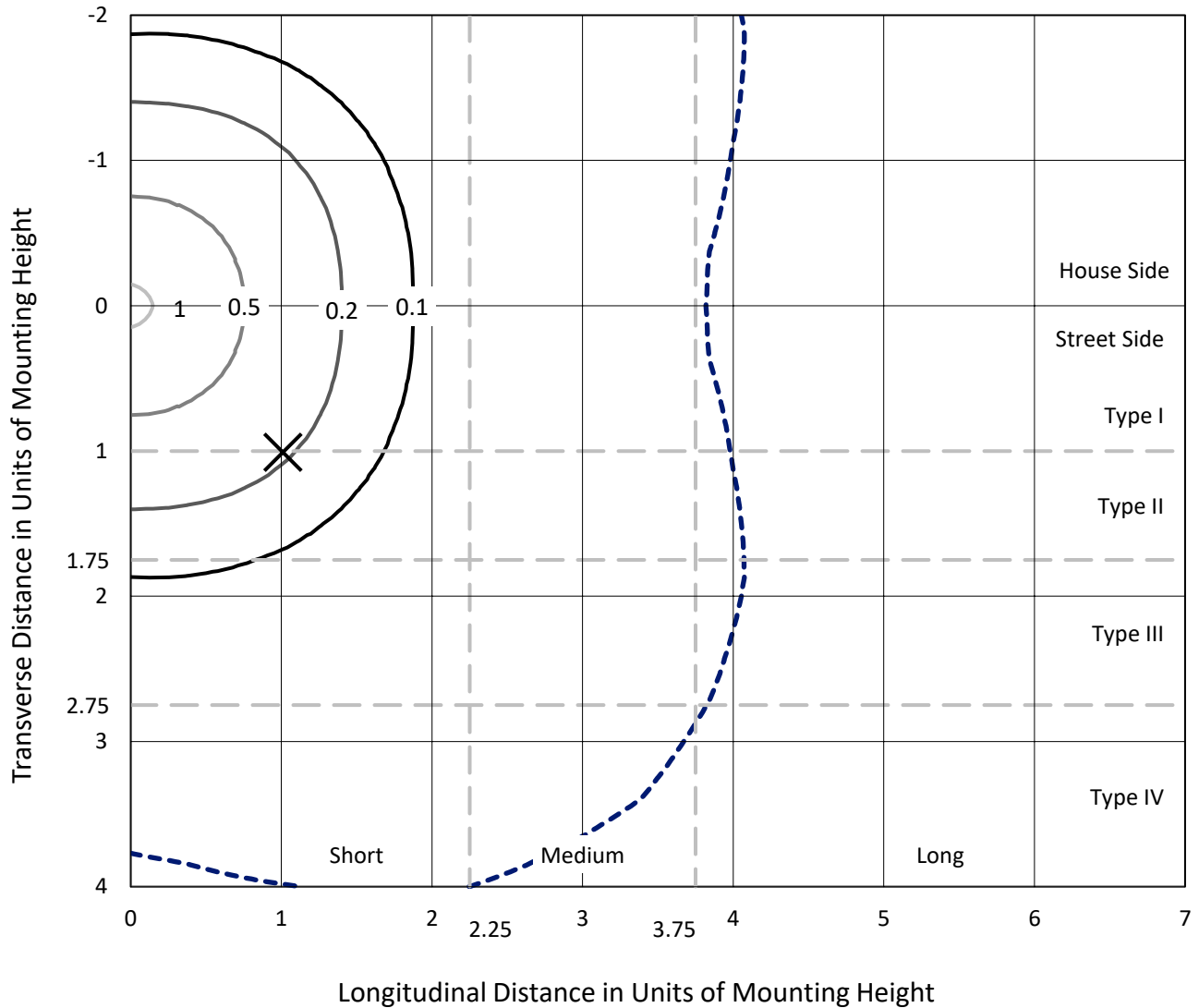
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

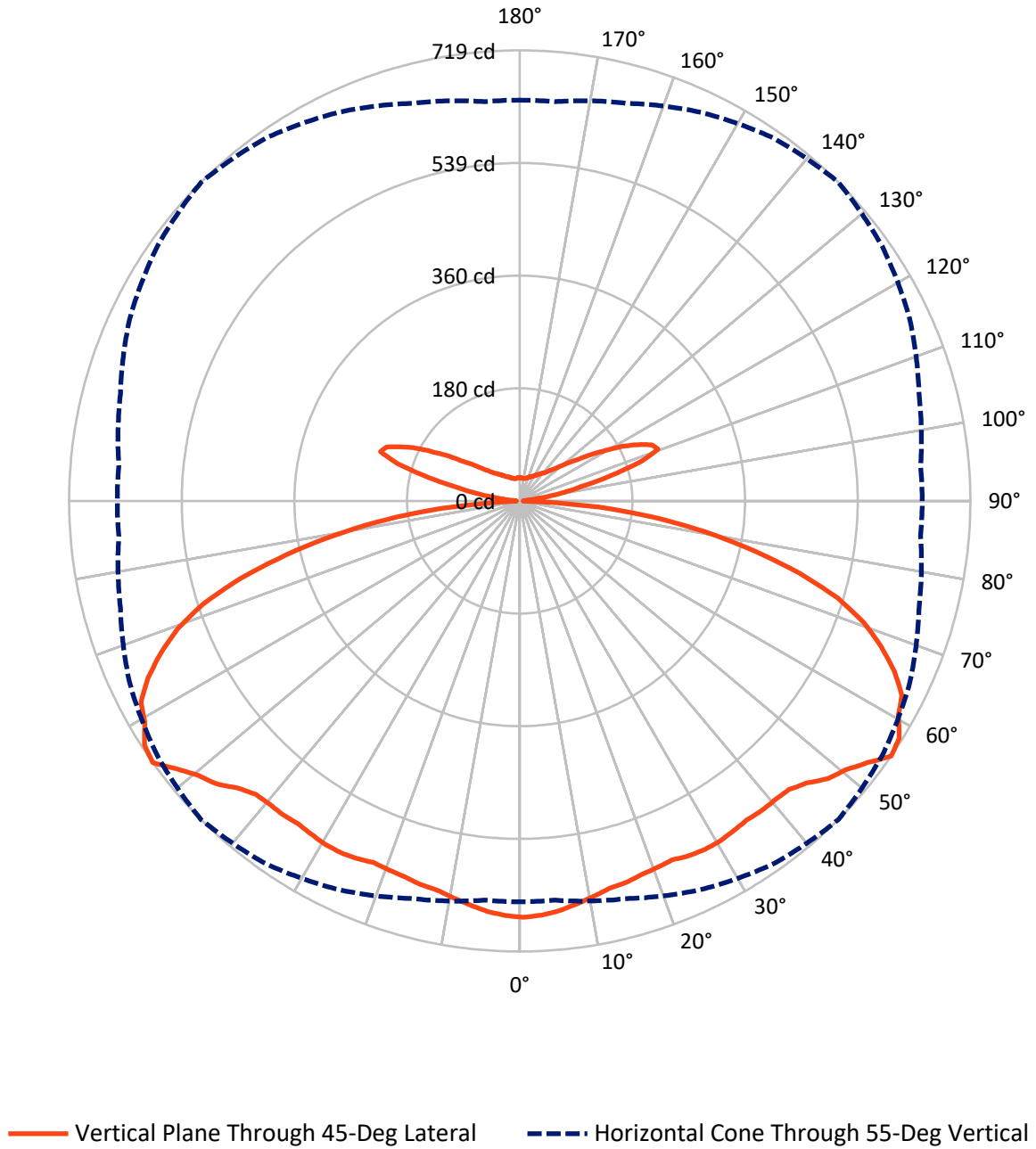
✕ Max cd
 - - - 1/2 Max cd



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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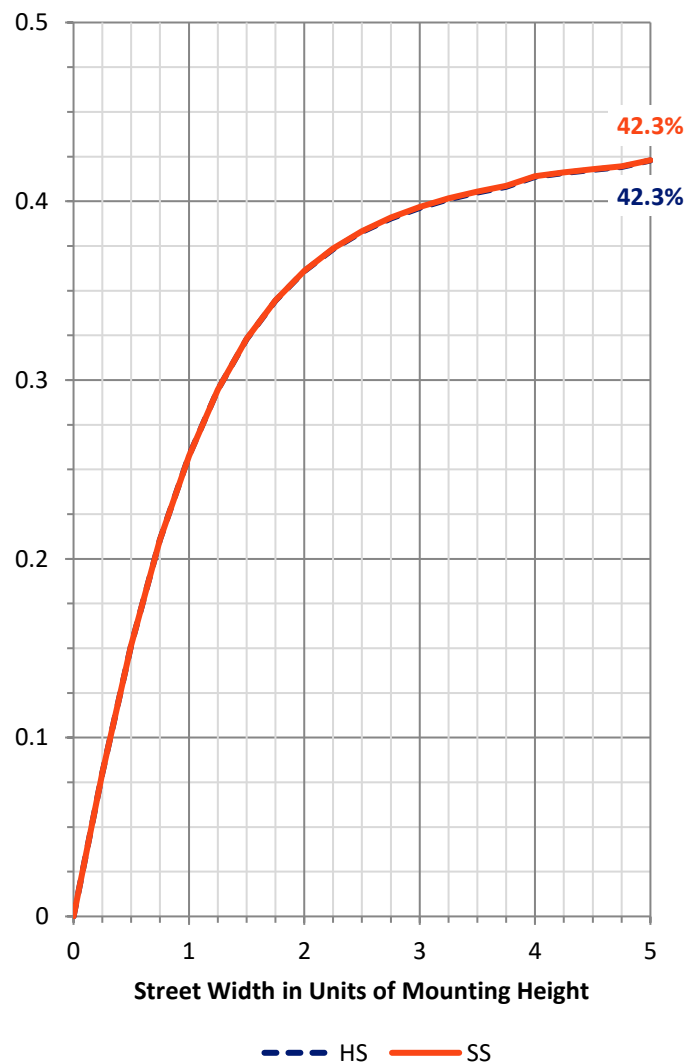
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1579.4	267.0	1846.4
	% Fixture	42.8	7.2	50.0
Street Side	Lumens	1579.4	267.0	1846.4
	% Fixture	42.8	7.2	50.0
Total	Lumens	3158.8	534.0	3692.8
	% Fixture	85.5	14.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	1.7
10°-20°	178.5	4.8
20°-30°	288.6	7.8
30°-40°	390.5	10.6
40°-50°	489.1	13.2
50°-60°	599.3	16.2
60°-70°	600.8	16.3
70°-80°	433.5	11.7
80°-90°	116.3	3.1
90°-100°	11.9	0.3
100°-110°	121.1	3.3
110°-120°	177.1	4.8
120°-130°	102.8	2.8
130°-140°	54.4	1.5
140°-150°	32.3	0.9
150°-160°	19.9	0.5
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	3158.8	85.5
0°-180°	3692.8	100.0

Coefficient of Utilization



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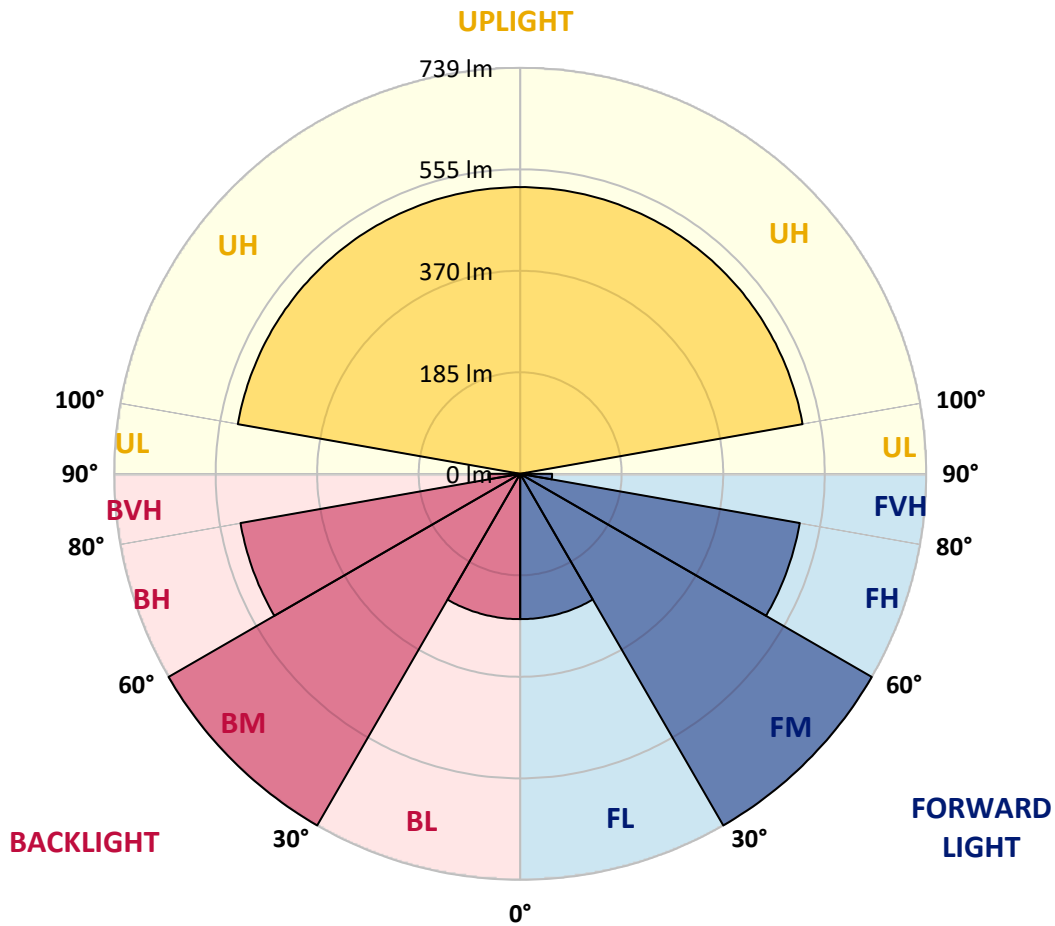
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	264.6	7.2			
FM (30°-60°)	739.4	20.0			
FH (60°-80°)	517.2	14.0			G0/660
FVH (80°-90°)	58.2	1.6			G1/100
BL (0°-30°)	264.6	7.2	B1/500		
BM (30°-60°)	739.4	20.0	B1/1000		
BH (60°-80°)	517.2	14.0	B2/1000		G0/660
BVH (80°-90°)	58.2	1.6			G1/100
UL (90°-100°)	11.9	0.3		U2/50	
UH (100°-180°)	522.1	14.1		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°	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4
2.5°	661.9	661.9	661.9	659.5	661.9	661.9	661.9	661.9	661.9	661.9	661.9
5°	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0
7.5°	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5
10°	639.6	639.6	639.6	639.6	642.1	642.1	642.1	642.1	639.6	639.6	639.6
12.5°	632.2	632.2	632.2	634.7	634.7	634.7	634.7	634.7	634.7	634.7	632.2
15°	629.7	629.7	629.7	629.7	632.2	632.2	632.2	632.2	629.7	629.7	629.7
17.5°	624.8	624.8	624.8	627.2	627.2	627.2	627.2	627.2	624.8	624.8	624.8
20°	619.8	619.8	622.3	622.3	624.8	624.8	624.8	622.3	622.3	619.8	622.3
22.5°	619.8	619.8	619.8	622.3	622.3	622.3	622.3	619.8	619.8	619.8	619.8
25°	619.8	619.8	622.3	624.8	624.8	627.2	624.8	622.3	619.8	619.8	619.8
27.5°	622.3	622.3	624.8	627.2	627.2	629.7	627.2	624.8	622.3	622.3	622.3
30°	622.3	622.3	624.8	627.2	627.2	629.7	627.2	624.8	622.3	622.3	622.3
32.5°	617.3	619.8	622.3	624.8	627.2	627.2	627.2	624.8	622.3	619.8	619.8
35°	614.8	617.3	619.8	622.3	624.8	624.8	624.8	622.3	619.8	617.3	617.3
37.5°	612.4	612.4	617.3	619.8	622.3	627.2	624.8	619.8	617.3	614.8	614.8
40°	609.9	612.4	614.8	619.8	622.3	627.2	624.8	619.8	614.8	612.4	612.4
42.5°	609.9	609.9	614.8	619.8	624.8	629.7	627.2	622.3	614.8	612.4	609.9
45°	612.4	614.8	622.3	632.2	637.1	642.1	639.6	632.2	619.8	614.8	612.4
47.5°	622.3	624.8	632.2	642.1	654.5	661.9	654.5	642.1	632.2	624.8	622.3
50°	627.2	629.7	642.1	654.5	671.9	674.3	671.9	654.5	642.1	629.7	629.7
52.5°	637.1	637.1	652.0	674.3	689.2	694.2	689.2	676.8	652.0	639.6	637.1
55°	639.6	639.6	657.0	684.3	706.6	719.0	706.6	686.7	659.5	642.1	642.1
57.5°	624.8	629.7	652.0	679.3	706.6	714.0	706.6	681.8	654.5	632.2	629.7
60°	607.4	614.8	634.7	666.9	686.7	694.2	689.2	666.9	637.1	614.8	612.4
62.5°	590.0	600.0	622.3	647.1	676.8	684.3	676.8	647.1	622.3	600.0	590.0
65°	552.9	562.8	595.0	624.8	652.0	657.0	654.5	624.8	595.0	562.8	557.8
67.5°	515.7	523.1	545.4	592.5	614.8	622.3	617.3	590.0	547.9	523.1	520.6
70°	476.0	483.4	503.3	547.9	570.2	582.6	572.7	547.9	503.3	483.4	481.0
72.5°	423.9	433.9	456.2	495.8	518.1	530.5	520.6	495.8	456.2	431.4	426.4
75°	362.0	369.4	396.7	428.9	451.2	461.1	453.7	431.4	396.7	369.4	366.9
77.5°	295.0	302.5	327.3	359.5	371.9	381.8	374.4	357.0	327.3	302.5	300.0
80°	223.1	230.6	252.9	277.7	290.1	300.0	292.5	275.2	252.9	230.6	228.1
82.5°	146.3	153.7	173.5	193.4	205.8	215.7	208.3	190.9	176.0	153.7	151.2
85°	62.0	69.4	86.8	106.6	116.5	126.4	119.0	104.1	86.8	71.9	69.4
87.5°	5.0	7.4	7.4	9.9	7.4	12.4	7.4	7.4	7.4	7.4	7.4
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)