

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: P833535

Luminaire Tested: **TTN-D2-735-U-MQ-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833535
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-D2-735-U-MQ-UPL3
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: 6007.7 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

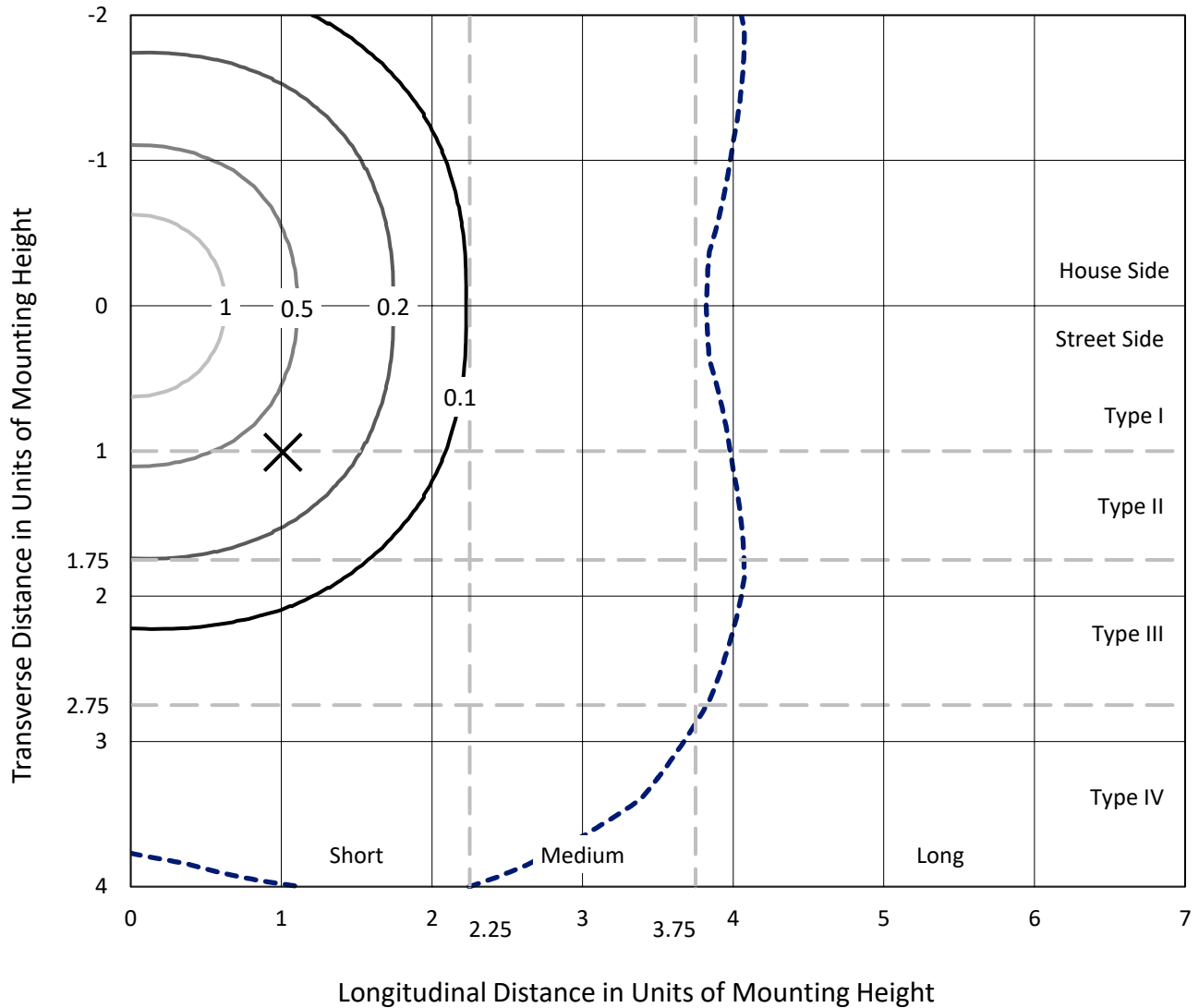
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

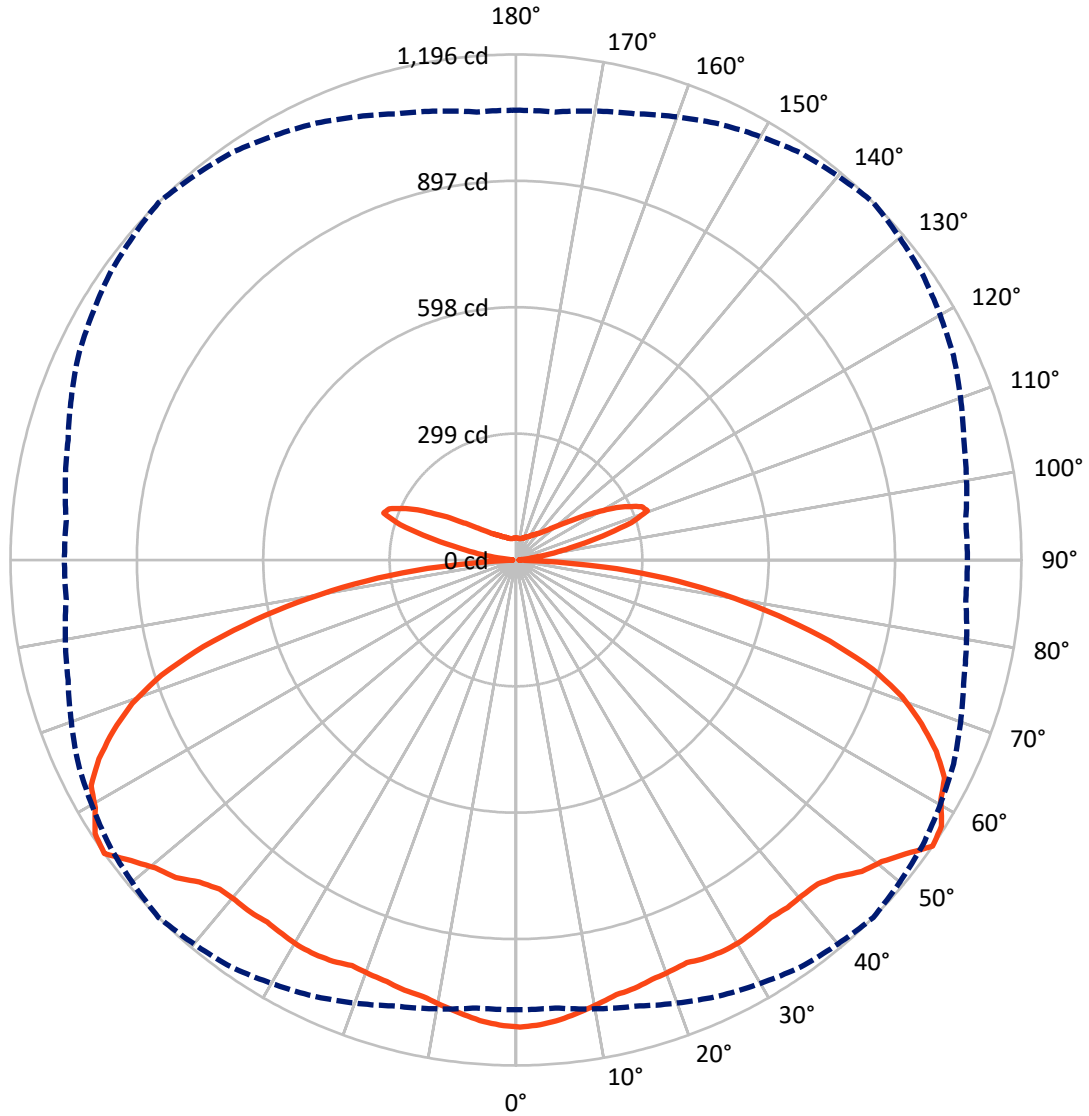
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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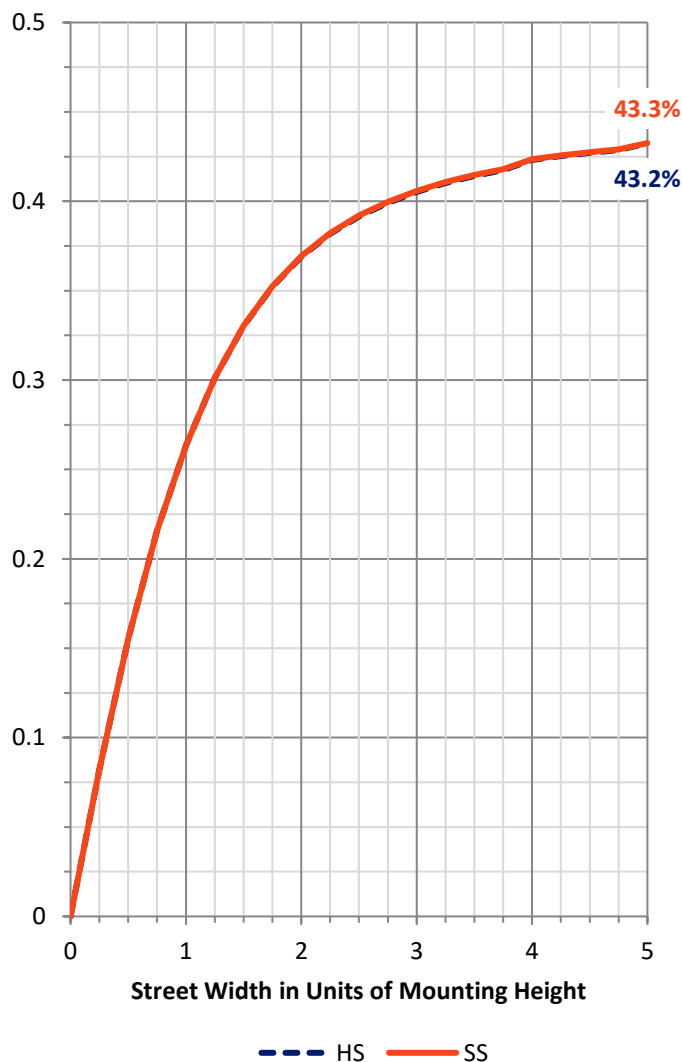
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2627.5	376.3	3003.8
	% Fixture	43.7	6.3	50.0
Street Side	Lumens	2627.5	376.3	3003.8
	% Fixture	43.7	6.3	50.0
Total	Lumens	5255.0	752.7	6007.7
	% Fixture	87.5	12.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	1.7
10°-20°	297.0	4.9
20°-30°	480.1	8.0
30°-40°	649.6	10.8
40°-50°	813.7	13.5
50°-60°	997.1	16.6
60°-70°	999.5	16.6
70°-80°	721.3	12.0
80°-90°	193.3	3.2
90°-100°	16.8	0.3
100°-110°	170.7	2.8
110°-120°	249.6	4.2
120°-130°	144.9	2.4
130°-140°	76.7	1.3
140°-150°	45.6	0.8
150°-160°	28.1	0.5
160°-170°	15.3	0.3
170°-180°	5.0	0.1
0°-90°	5255.0	87.5
0°-180°	6007.7	100.0

Coefficient of Utilization

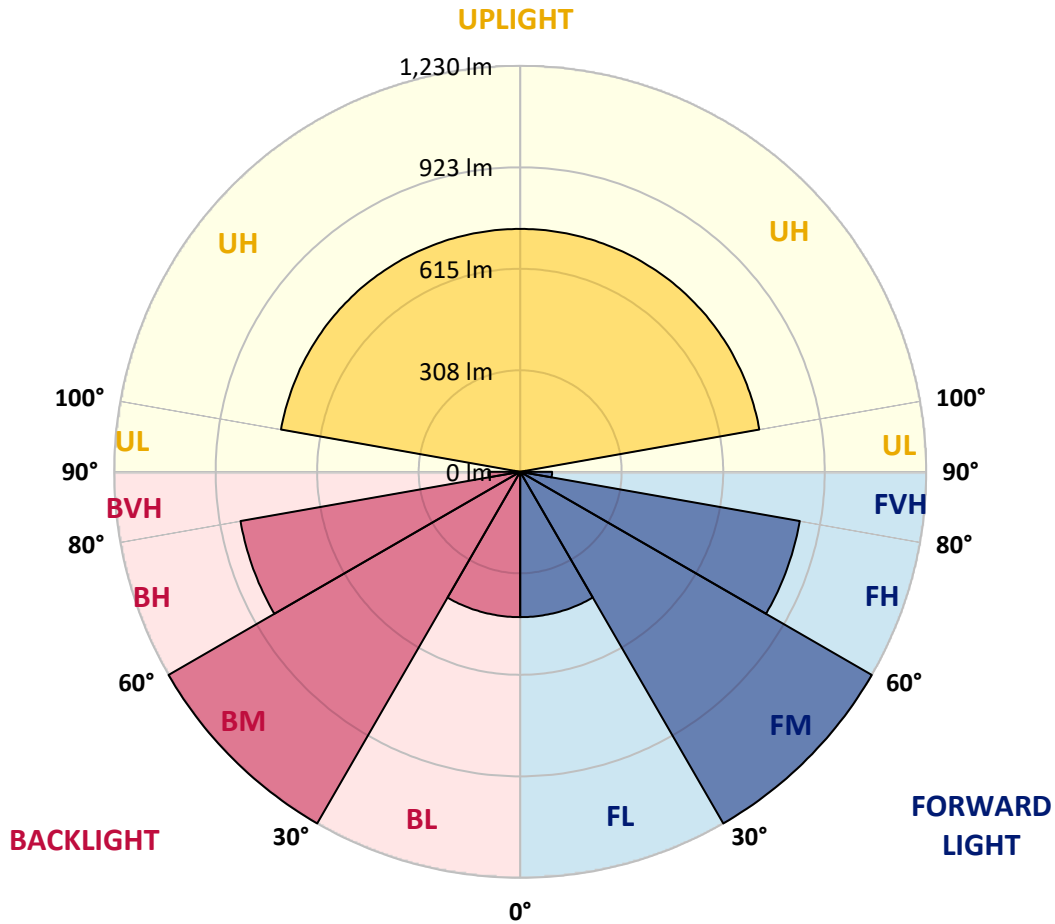


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	440.3	7.3			
FM (30°-60°)	1230.2	20.5			
FH (60°-80°)	860.4	14.3			G1/1800
FVH (80°-90°)	96.7	1.6			G1/100
BL (0°-30°)	440.3	7.3	B1/500		
BM (30°-60°)	1230.2	20.5	B2/2500		
BH (60°-80°)	860.4	14.3	B2/1000		G1/1800
BVH (80°-90°)	96.7	1.6			G1/100
UL (90°-100°)	16.8	0.3		U2/50	
UH (100°-180°)	735.8	12.2		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°	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4	1105.4
2.5°	1101.3	1101.3	1101.3	1097.2	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3
5°	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0	1093.0
7.5°	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7	1080.7
10°	1064.2	1064.2	1064.2	1064.2	1068.3	1068.3	1068.3	1068.3	1064.2	1064.2	1064.2
12.5°	1051.8	1051.8	1051.8	1055.9	1055.9	1055.9	1055.9	1055.9	1055.9	1055.9	1051.8
15°	1047.7	1047.7	1047.7	1047.7	1051.8	1051.8	1051.8	1051.8	1047.7	1047.7	1047.7
17.5°	1039.4	1039.4	1039.4	1043.5	1043.5	1043.5	1043.5	1043.5	1039.4	1039.4	1039.4
20°	1031.2	1031.2	1035.3	1035.3	1039.4	1039.4	1039.4	1035.3	1035.3	1031.2	1035.3
22.5°	1031.2	1031.2	1031.2	1035.3	1035.3	1035.3	1035.3	1031.2	1031.2	1031.2	1031.2
25°	1031.2	1031.2	1035.3	1039.4	1039.4	1043.5	1039.4	1035.3	1031.2	1031.2	1031.2
27.5°	1035.3	1035.3	1039.4	1043.5	1043.5	1047.7	1043.5	1039.4	1035.3	1035.3	1035.3
30°	1035.3	1035.3	1039.4	1043.5	1043.5	1047.7	1043.5	1039.4	1035.3	1035.3	1035.3
32.5°	1027.0	1031.2	1035.3	1039.4	1043.5	1043.5	1043.5	1039.4	1035.3	1031.2	1031.2
35°	1022.9	1027.0	1031.2	1035.3	1039.4	1039.4	1039.4	1035.3	1031.2	1027.0	1027.0
37.5°	1018.8	1018.8	1027.0	1031.2	1035.3	1043.5	1039.4	1031.2	1027.0	1022.9	1022.9
40°	1014.7	1018.8	1022.9	1031.2	1035.3	1043.5	1039.4	1031.2	1022.9	1018.8	1018.8
42.5°	1014.7	1014.7	1022.9	1031.2	1039.4	1047.7	1043.5	1035.3	1022.9	1018.8	1014.7
45°	1018.8	1022.9	1035.3	1051.8	1060.0	1068.3	1064.2	1051.8	1031.2	1022.9	1018.8
47.5°	1035.3	1039.4	1051.8	1068.3	1088.9	1101.3	1088.9	1068.3	1051.8	1039.4	1035.3
50°	1043.5	1047.7	1068.3	1088.9	1117.8	1121.9	1117.8	1088.9	1068.3	1047.7	1047.7
52.5°	1060.0	1060.0	1084.8	1121.9	1146.6	1154.9	1146.6	1126.0	1084.8	1064.2	1060.0
55°	1064.2	1064.2	1093.0	1138.4	1175.5	1196.1	1175.5	1142.5	1097.2	1068.3	1068.3
57.5°	1039.4	1047.7	1084.8	1130.1	1175.5	1187.9	1175.5	1134.3	1088.9	1051.8	1047.7
60°	1010.5	1022.9	1055.9	1109.5	1142.5	1154.9	1146.6	1109.5	1060.0	1022.9	1018.8
62.5°	981.7	998.2	1035.3	1076.5	1126.0	1138.4	1126.0	1076.5	1035.3	998.2	981.7
65°	919.8	936.3	989.9	1039.4	1084.8	1093.0	1088.9	1039.4	989.9	936.3	928.0
67.5°	857.9	870.3	907.4	985.8	1022.9	1035.3	1027.0	981.7	911.5	870.3	866.2
70°	791.9	804.3	837.3	911.5	948.7	969.3	952.8	911.5	837.3	804.3	800.2
72.5°	705.3	721.8	758.9	824.9	862.0	882.7	866.2	824.9	758.9	717.7	709.4
75°	602.2	614.6	659.9	713.6	750.7	767.2	754.8	717.7	659.9	614.6	610.4
77.5°	490.8	503.2	544.5	598.1	618.7	635.2	622.8	593.9	544.5	503.2	499.1
80°	371.2	383.6	420.7	462.0	482.6	499.1	486.7	457.8	420.7	383.6	379.5
82.5°	243.4	255.7	288.7	321.7	342.3	358.8	346.5	317.6	292.8	255.7	251.6
85°	103.1	115.5	144.4	177.4	193.9	210.4	198.0	173.2	144.4	119.6	115.5
87.5°	8.2	12.4	12.4	16.5	12.4	20.6	12.4	12.4	12.4	12.4	12.4
90°	6.4	6.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.4	6.4
92.5°	6.4	6.4	6.4	9.0	10.3	9.0	10.3	7.7	7.7	6.4	6.4
95°	7.7	7.7	9.0	11.6	14.2	15.5	15.5	9.0	9.0	7.7	7.7
97.5°	10.3	11.6	11.6	14.2	23.2	42.5	25.8	12.9	12.9	11.6	10.3
100°	16.7	18.0	18.0	32.2	68.2	91.4	65.7	33.5	24.5	18.0	18.0
102.5°	54.1	56.7	69.5	104.3	154.5	140.4	118.5	112.0	77.3	61.8	59.2
105°	137.8	136.5	146.8	173.8	216.3	212.5	195.7	177.7	153.2	141.6	141.6
107.5°	181.6	181.6	190.6	213.8	245.9	287.1	291.0	230.5	202.2	189.3	188.0
110°	204.7	204.7	212.5	231.8	274.3	332.2	329.6	284.6	249.8	233.1	230.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	209.9	211.2	221.5	251.1	297.5	323.2	311.6	293.6	278.1	265.3	262.7
115°	217.6	217.6	229.2	257.5	283.3	293.6	280.7	266.5	256.2	251.1	253.7
117.5°	215.0	218.9	221.5	236.9	253.7	261.4	255.0	235.6	227.9	225.3	221.5
120°	199.6	199.6	202.2	209.9	218.9	222.8	220.2	207.3	200.9	199.6	197.0
122.5°	177.7	179.0	177.7	181.6	188.0	191.9	189.3	179.0	176.4	176.4	173.8
125°	155.8	155.8	154.5	157.1	161.0	159.7	161.0	155.8	154.5	154.5	153.2
127.5°	140.4	139.1	136.5	137.8	139.1	139.1	140.4	135.2	136.5	137.8	136.5
130°	124.9	124.9	122.3	122.3	122.3	119.8	122.3	119.8	121.0	122.3	123.6
132.5°	110.7	110.7	106.9	105.6	105.6	105.6	106.9	105.6	108.2	110.7	110.7
135°	99.2	99.2	95.3	96.6	96.6	95.3	96.6	95.3	97.9	99.2	99.2
137.5°	90.1	90.1	87.6	87.6	87.6	86.3	87.6	87.6	88.8	91.4	92.7
140°	82.4	82.4	81.1	81.1	79.8	81.1	81.1	81.1	82.4	83.7	83.7
142.5°	78.5	77.3	76.0	74.7	76.0	76.0	76.0	74.7	76.0	78.5	78.5
145°	72.1	72.1	70.8	70.8	70.8	72.1	70.8	70.8	72.1	72.1	73.4
147.5°	68.2	68.2	67.0	68.2	68.2	68.2	68.2	67.0	68.2	68.2	69.5
150°	67.0	65.7	64.4	65.7	65.7	64.4	64.4	64.4	64.4	65.7	65.7
152.5°	63.1	63.1	61.8	63.1	61.8	61.8	61.8	61.8	61.8	63.1	64.4
155°	60.5	60.5	59.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
157.5°	57.9	59.2	57.9	57.9	57.9	57.9	57.9	57.9	57.9	59.2	59.2
160°	56.7	56.7	56.7	56.7	55.4	55.4	55.4	56.7	56.7	56.7	57.9
162.5°	55.4	55.4	55.4	55.4	54.1	54.1	54.1	54.1	55.4	55.4	56.7
165°	55.4	54.1	54.1	54.1	52.8	52.8	52.8	52.8	54.1	55.4	54.1
167.5°	52.8	52.8	52.8	52.8	52.8	51.5	51.5	52.8	52.8	52.8	54.1
170°	52.8	52.8	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	52.8
172.5°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	51.5	51.5	52.8	52.8
175°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	52.8	52.8	52.8	51.5
177.5°	52.8	52.8	52.8	52.8	51.5	52.8	52.8	52.8	52.8	52.8	52.8
180°	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8

(END OF REPORT)