

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: P833547

Luminaire Tested: **TTN-D2-735-U-WQ-SG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833547
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-WQ-SG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5418.7 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

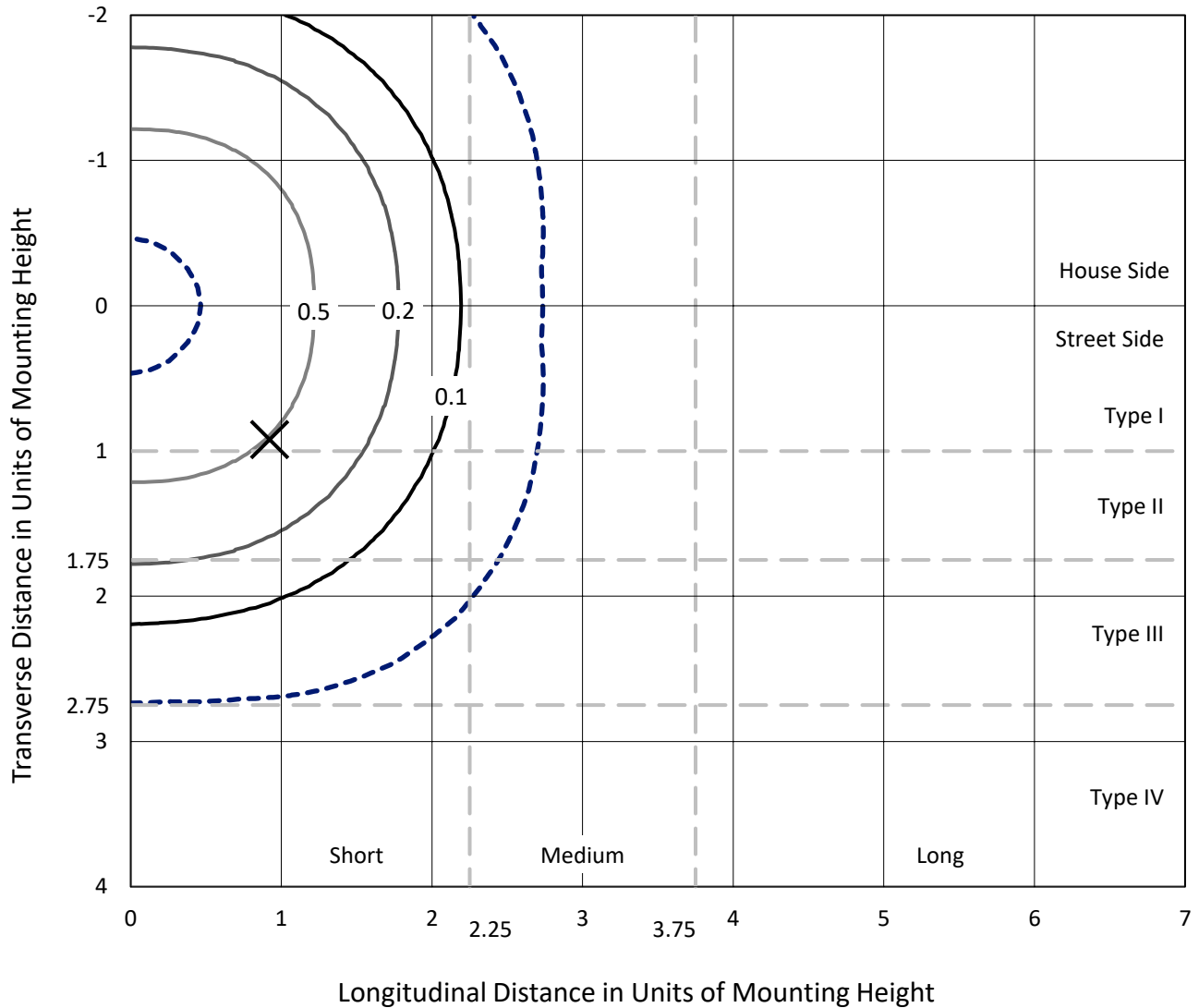
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833547
 CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

Iso-Footcandle Lines of Horizontal Illumination

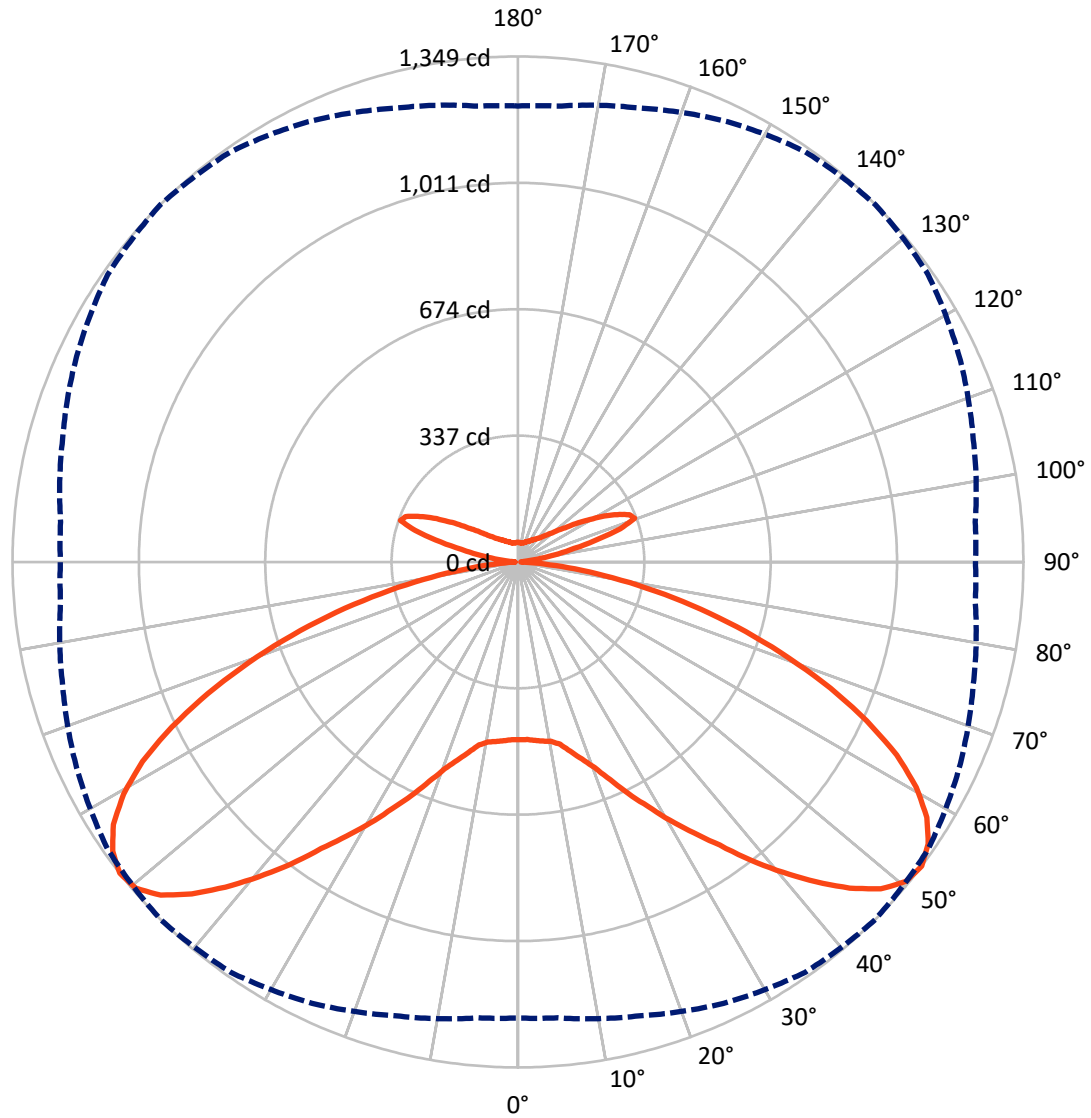
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type V - Short - N/A

REPORT NUMBER: P833547
CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

REPORT NUMBER: P833547
 CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

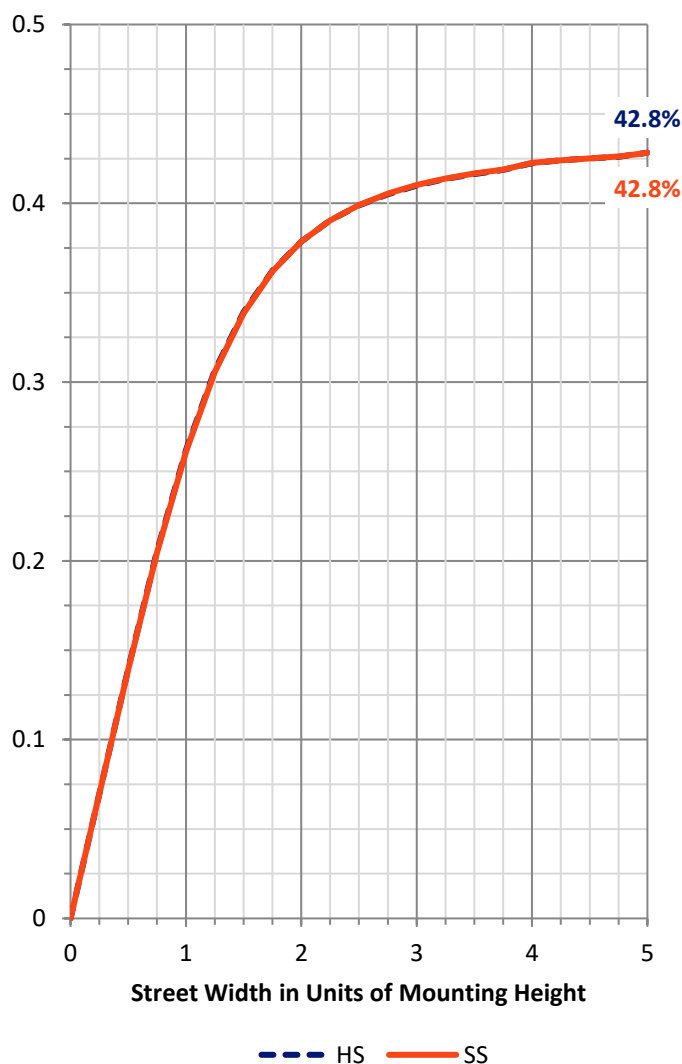
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2333.0	376.3	2709.3
	% Fixture	43.1	6.9	50.0
Street Side	Lumens	2333.0	376.3	2709.3
	% Fixture	43.1	6.9	50.0
Total	Lumens	4666.0	752.7	5418.7
	% Fixture	86.1	13.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.8	0.8
10°-20°	150.5	2.8
20°-30°	317.7	5.9
30°-40°	580.4	10.7
40°-50°	923.9	17.1
50°-60°	1117.2	20.6
60°-70°	939.4	17.3
70°-80°	497.9	9.2
80°-90°	93.1	1.7
90°-100°	16.8	0.3
100°-110°	170.7	3.2
110°-120°	249.6	4.6
120°-130°	144.9	2.7
130°-140°	76.7	1.4
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°	4666.0	86.1
0°-180°	5418.7	100.0

Coefficient of Utilization

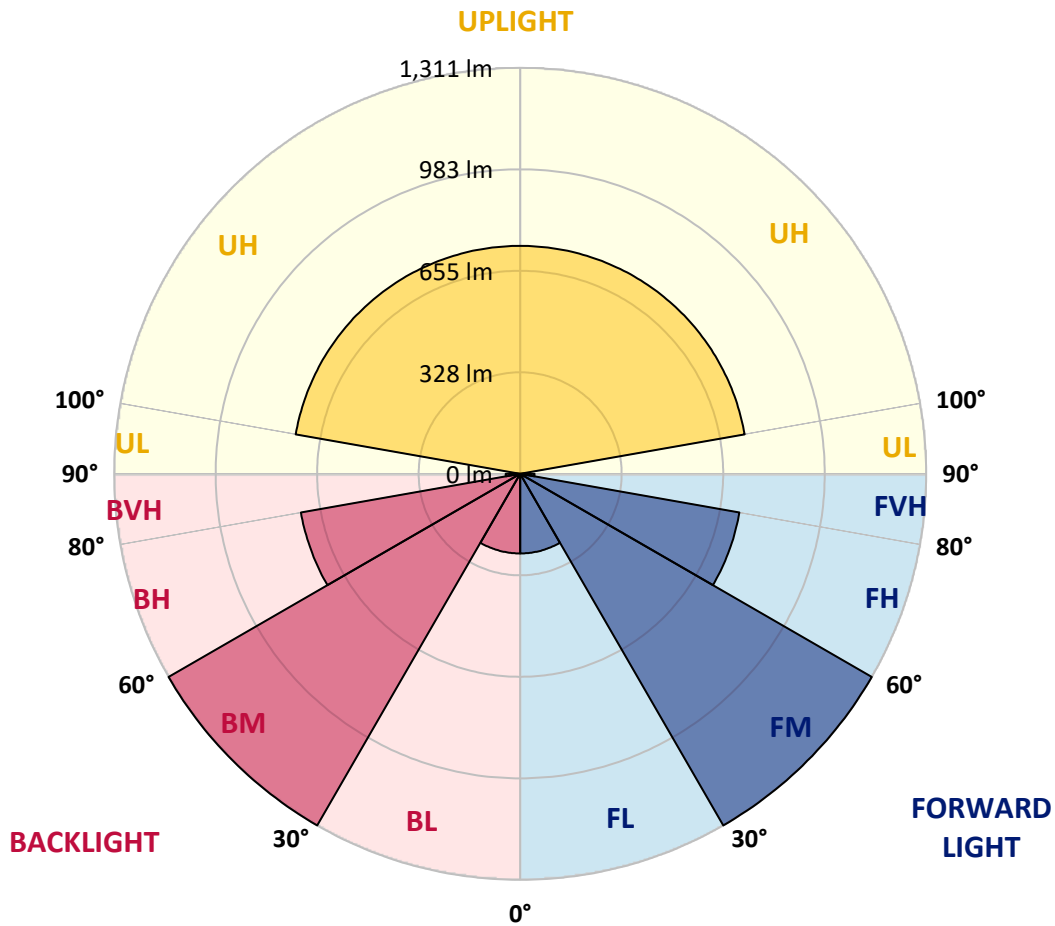


REPORT NUMBER: P833547
 CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	257.0	4.7			
FM (30°-60°)	1310.7	24.2			
FH (60°-80°)	718.7	13.3			G1/1800
FVH (80°-90°)	46.6	0.9			G1/100
BL (0°-30°)	257.0	4.7	B1/500		
BM (30°-60°)	1310.7	24.2	B2/2500		
BH (60°-80°)	718.7	13.3	B2/1000		G1/1800
BVH (80°-90°)	46.6	0.9			G1/100
UL (90°-100°)	16.8	0.3		U2/50	
UH (100°-180°)	735.8	13.6		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





REPORT NUMBER: P833547

CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
2.5°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
5°	478.4	478.4	474.3	478.4	478.4	478.4	478.4	478.4	478.4	478.4	478.4
7.5°	478.4	478.4	478.4	482.5	482.5	482.5	482.5	478.4	478.4	478.4	478.4
10°	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7
12.5°	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0	499.0
15°	519.6	519.6	519.6	519.6	523.8	523.8	523.8	519.6	519.6	519.6	519.6
17.5°	544.4	544.4	548.5	548.5	552.6	552.6	552.6	548.5	544.4	548.5	544.4
20°	581.5	581.5	581.5	585.6	589.8	589.8	589.8	581.5	581.5	581.5	581.5
22.5°	622.7	622.7	622.7	626.9	631.0	631.0	631.0	622.7	622.7	622.7	622.7
25°	672.2	672.2	672.2	676.4	680.5	684.6	684.6	676.4	672.2	672.2	668.1
27.5°	721.7	721.7	730.0	734.1	738.2	738.2	738.2	730.0	725.9	725.9	725.9
30°	779.5	779.5	787.7	791.8	800.1	800.1	800.1	787.7	783.6	779.5	779.5
32.5°	833.1	837.2	845.5	853.7	861.9	861.9	866.1	849.6	841.3	837.2	837.2
35°	890.8	894.9	903.2	915.6	923.8	927.9	932.1	915.6	903.2	899.1	899.1
37.5°	956.8	960.9	973.3	985.7	1002.2	1010.4	1014.5	989.8	969.2	960.9	960.9
40°	1031.0	1035.2	1047.5	1064.0	1080.5	1088.8	1092.9	1068.2	1047.5	1039.3	1035.2
42.5°	1092.9	1101.2	1113.5	1138.3	1154.8	1167.1	1167.1	1138.3	1113.5	1101.2	1101.2
45°	1150.6	1158.9	1179.5	1204.3	1229.0	1241.4	1237.2	1208.4	1179.5	1163.0	1158.9
47.5°	1196.0	1204.3	1229.0	1257.9	1290.9	1303.2	1299.1	1266.1	1229.0	1208.4	1204.3
50°	1220.8	1224.9	1253.7	1295.0	1328.0	1340.4	1332.1	1299.1	1257.9	1229.0	1224.9
52.5°	1216.6	1220.8	1253.7	1299.1	1336.2	1348.6	1336.2	1299.1	1257.9	1224.9	1220.8
55°	1191.9	1196.0	1229.0	1278.5	1315.6	1328.0	1315.6	1278.5	1233.1	1200.1	1196.0
57.5°	1146.5	1150.6	1183.6	1233.1	1274.4	1286.7	1270.2	1229.0	1183.6	1150.6	1150.6
60°	1080.5	1084.7	1117.6	1171.3	1208.4	1220.8	1200.1	1167.1	1121.8	1084.7	1080.5
62.5°	993.9	993.9	1031.0	1084.7	1117.6	1134.1	1113.5	1076.4	1035.2	993.9	998.0
65°	890.8	886.7	923.8	973.3	1010.4	1022.8	1002.2	969.2	927.9	890.8	890.8
67.5°	783.6	783.6	812.5	853.7	886.7	899.1	878.4	849.6	816.6	783.6	783.6
70°	668.1	668.1	688.7	730.0	758.8	767.1	754.7	725.9	697.0	668.1	668.1
72.5°	552.6	548.5	569.1	602.1	626.9	635.1	622.7	606.3	573.3	552.6	552.6
75°	437.2	433.0	445.4	474.3	494.9	503.1	490.8	478.4	453.7	437.2	437.2
77.5°	325.8	321.7	334.1	358.8	371.2	375.3	367.1	358.8	338.2	325.8	325.8
80°	222.7	218.6	226.8	243.3	255.7	255.7	251.6	247.4	231.0	222.7	226.8
82.5°	132.0	127.8	136.1	148.5	156.7	152.6	152.6	148.5	136.1	132.0	132.0
85°	57.7	53.6	57.7	66.0	74.2	70.1	70.1	70.1	61.9	57.7	57.7
87.5°	8.2	8.2	8.2	12.4	16.5	12.4	12.4	12.4	8.2	8.2	8.2
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



REPORT NUMBER: P833547
 CATALOG NUMBER: TTN-D2-735-U-WQ-SG-UPL3

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)