

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: P833579

Luminaire Tested: **TTN-D2-740-U-WQ-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833579
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-D2-740-U-WQ-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5871.7 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B3 - U4 - G2

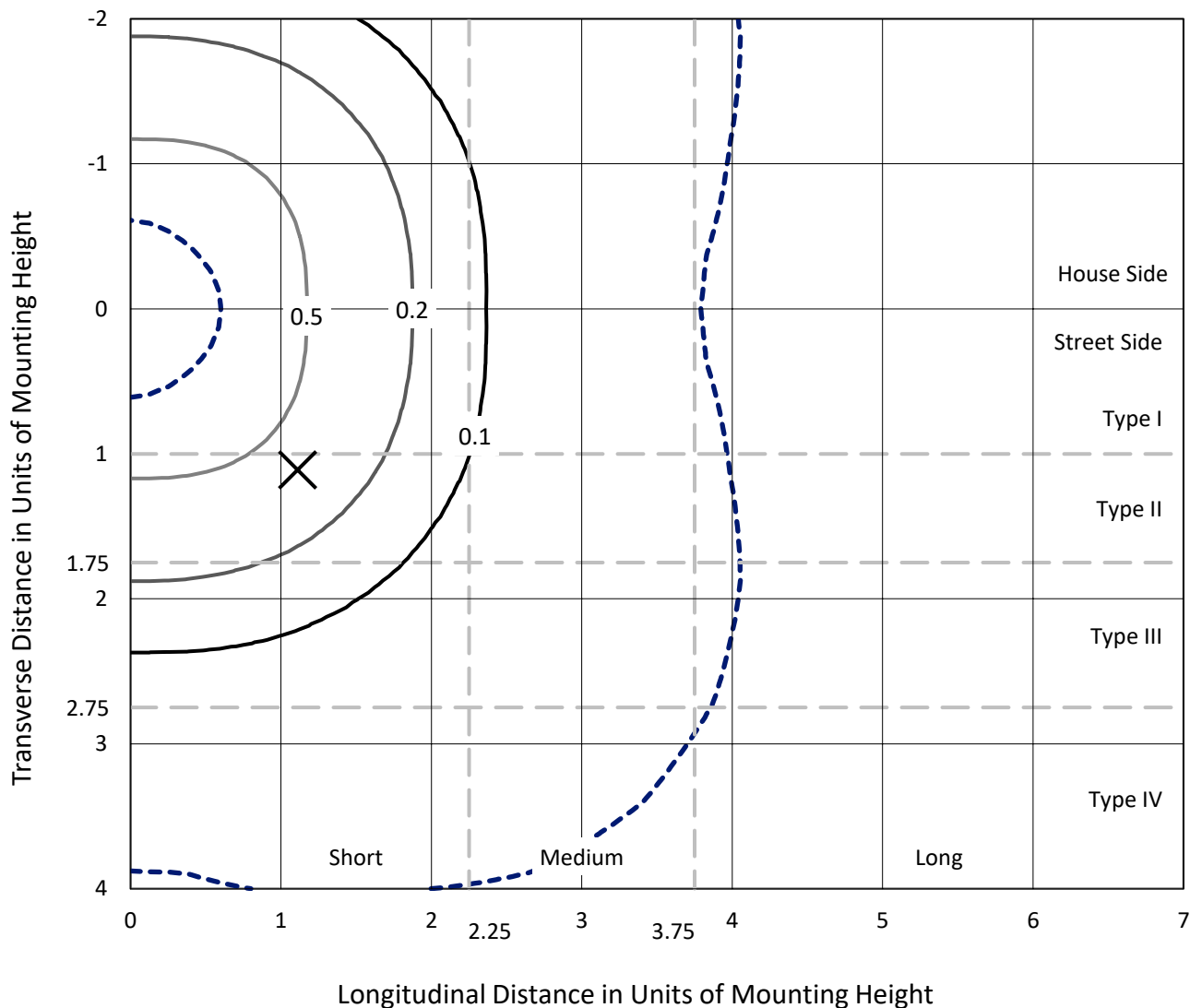
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833579
 CATALOG NUMBER: TTN-D2-740-U-WQ-UPL2

Iso-Footcandle Lines of Horizontal Illumination

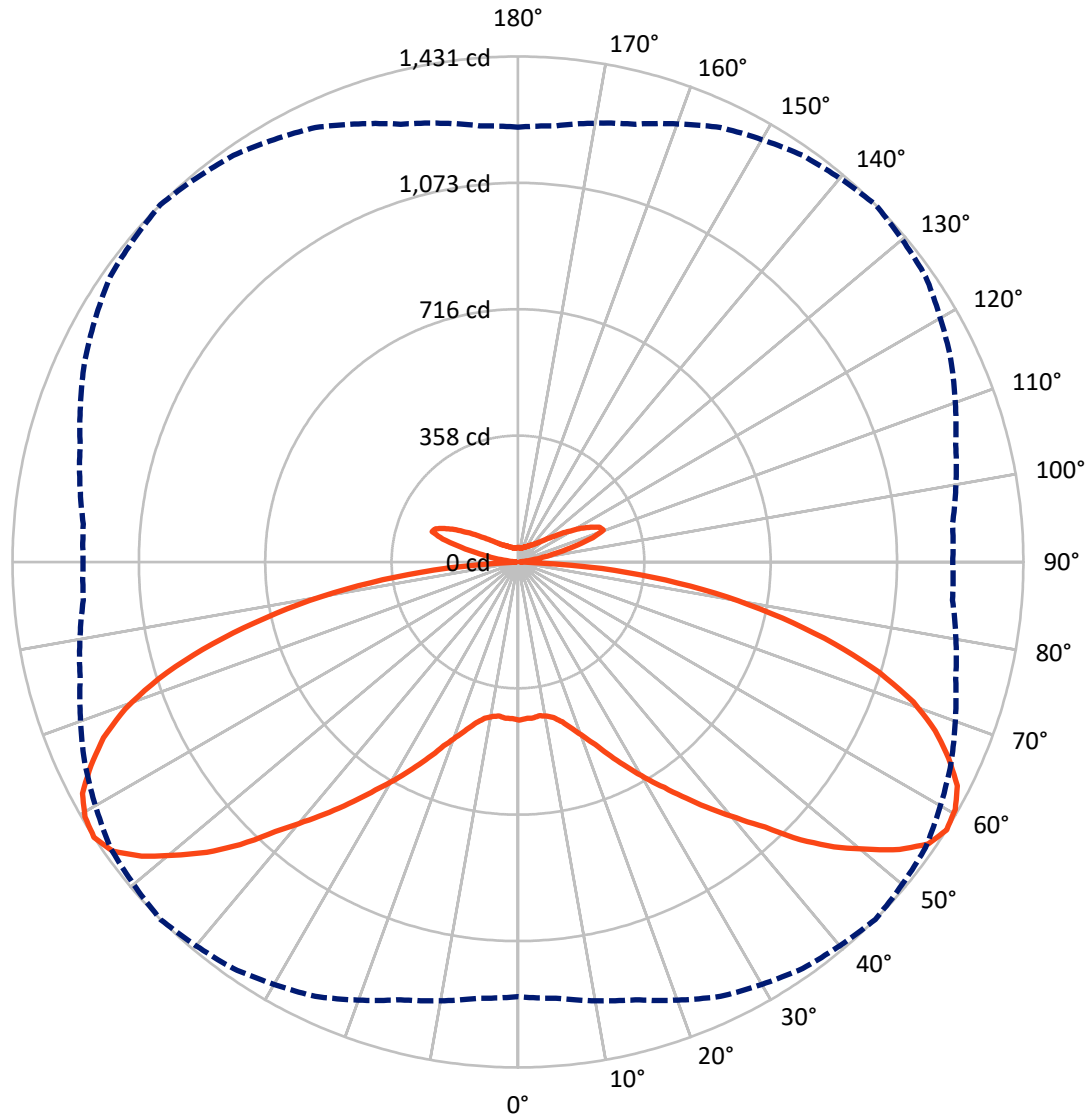
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

REPORT NUMBER: P833579
CATALOG NUMBER: TTN-D2-740-U-WQ-UPL2

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P833579

CATALOG NUMBER: TTN-D2-740-U-WQ-UPL2

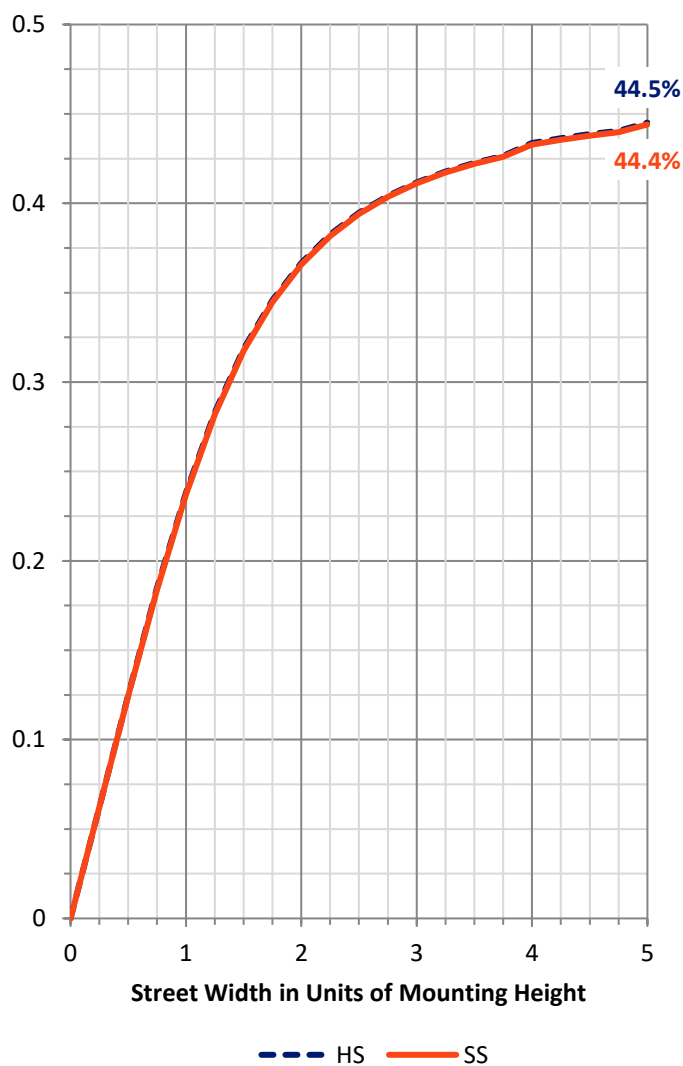
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2643.4	292.5	2935.9
	% Fixture	45.0	5.0	50.0
Street Side	Lumens	2643.4	292.5	2935.9
	% Fixture	45.0	5.0	50.0
Total	Lumens	5286.8	584.9	5871.7
	% Fixture	90.0	10.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	0.7
10°-20°	134.4	2.3
20°-30°	282.0	4.8
30°-40°	511.6	8.7
40°-50°	834.0	14.2
50°-60°	1167.3	19.9
60°-70°	1218.6	20.8
70°-80°	870.7	14.8
80°-90°	226.1	3.9
90°-100°	13.1	0.2
100°-110°	132.7	2.3
110°-120°	194.0	3.3
120°-130°	112.6	1.9
130°-140°	59.7	1.0
140°-150°	35.4	0.6
150°-160°	21.8	0.4
160°-170°	11.9	0.2
170°-180°	3.9	0.1
0°-90°	5286.8	90.0
0°-180°	5871.7	100.0

Coefficient of Utilization



REPORT NUMBER: P833579

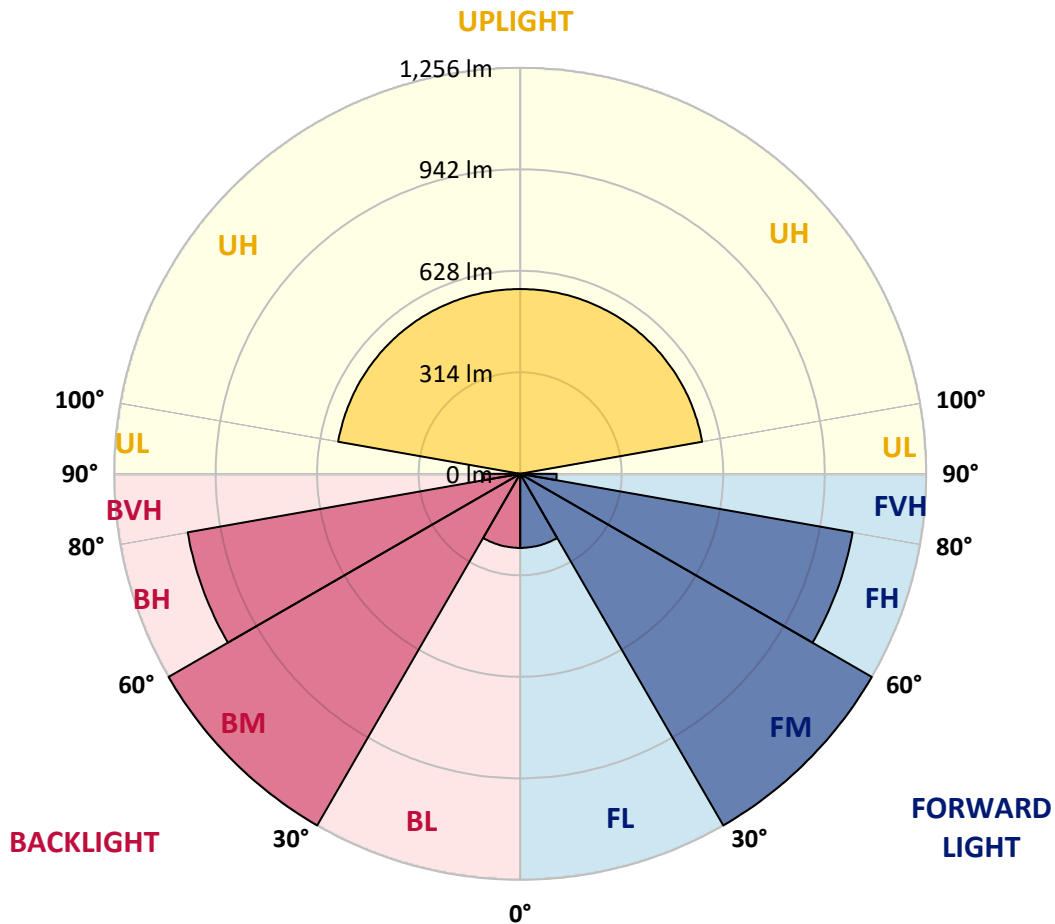
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.3	3.9			
FM (30°-60°)	1256.4	21.4			
FH (60°-80°)	1044.7	17.8			G1/1800
FVH (80°-90°)	113.0	1.9			G2/225
BL (0°-30°)	229.3	3.9	B1/500		
BM (30°-60°)	1256.4	21.4	B2/2500		
BH (60°-80°)	1044.7	17.8	B3/2500		G1/1800
BVH (80°-90°)	113.0	1.9			G2/225
UL (90°-100°)	13.1	0.2		U2/50	
UH (100°-180°)	571.8	9.7		U4/1000	

BUG Rating: B3-U4-G2

Type V Short





REPORT NUMBER: P833579
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1	448.1
2.5°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
5°	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7	443.7
7.5°	435.0	435.0	439.4	439.4	439.4	439.4	439.4	439.4	439.4	439.4	439.4
10°	435.0	435.0	439.4	439.4	443.7	443.7	443.7	439.4	439.4	435.0	435.0
12.5°	443.7	443.7	443.7	448.1	452.4	452.4	452.4	448.1	448.1	443.7	443.7
15°	456.8	461.1	461.1	465.5	469.8	469.8	469.8	465.5	465.5	461.1	461.1
17.5°	482.9	482.9	482.9	487.2	491.6	495.9	495.9	487.2	487.2	482.9	487.2
20°	509.0	513.3	513.3	517.7	522.0	526.4	522.0	517.7	513.3	513.3	513.3
22.5°	548.1	548.1	552.5	552.5	561.2	561.2	561.2	552.5	552.5	552.5	552.5
25°	591.6	591.6	596.0	600.3	609.0	609.0	604.7	596.0	596.0	596.0	600.3
27.5°	643.8	643.8	648.2	648.2	656.9	656.9	652.5	648.2	648.2	648.2	652.5
30°	691.7	691.7	700.4	704.7	709.1	709.1	709.1	700.4	700.4	696.0	696.0
32.5°	735.2	739.5	743.9	756.9	765.6	761.3	765.6	756.9	748.2	743.9	743.9
35°	783.0	787.4	796.1	809.1	822.2	822.2	822.2	809.1	800.4	791.7	796.1
37.5°	839.6	839.6	852.6	865.7	883.1	887.4	883.1	870.0	857.0	848.3	848.3
40°	900.5	900.5	913.5	926.6	948.3	952.7	948.3	930.9	913.5	909.2	909.2
42.5°	961.4	961.4	978.8	991.8	1017.9	1026.6	1017.9	996.2	978.8	965.7	970.1
45°	1026.6	1031.0	1052.7	1078.8	1109.3	1122.3	1109.3	1083.2	1057.1	1031.0	1031.0
47.5°	1100.6	1100.6	1126.7	1157.1	1191.9	1205.0	1187.6	1161.5	1126.7	1104.9	1104.9
50°	1148.4	1152.8	1187.6	1226.7	1270.2	1278.9	1265.9	1226.7	1187.6	1157.1	1152.8
52.5°	1196.3	1200.6	1239.8	1296.3	1339.8	1352.9	1335.5	1296.3	1239.8	1200.6	1200.6
55°	1226.7	1235.4	1278.9	1339.8	1387.7	1409.4	1383.3	1339.8	1274.6	1231.1	1226.7
57.5°	1231.1	1239.8	1283.3	1357.2	1405.1	1431.2	1409.4	1352.9	1283.3	1235.4	1231.1
60°	1222.4	1226.7	1270.2	1348.5	1405.1	1422.5	1405.1	1344.2	1265.9	1226.7	1218.0
62.5°	1200.6	1209.3	1252.8	1318.1	1383.3	1396.4	1379.0	1313.7	1248.5	1200.6	1191.9
65°	1131.0	1139.7	1205.0	1270.2	1326.8	1339.8	1326.8	1270.2	1200.6	1131.0	1122.3
67.5°	1052.7	1057.1	1122.3	1200.6	1252.8	1274.6	1252.8	1205.0	1118.0	1052.7	1044.0
70°	970.1	974.4	1026.6	1109.3	1161.5	1187.6	1165.8	1113.6	1022.3	965.7	961.4
72.5°	874.4	874.4	926.6	991.8	1044.0	1070.1	1052.7	987.5	917.9	861.3	852.6
75°	743.9	748.2	804.8	852.6	909.2	926.6	909.2	857.0	791.7	735.2	726.5
77.5°	609.0	613.4	661.2	700.4	752.6	765.6	752.6	709.1	648.2	600.3	596.0
80°	461.1	465.5	504.6	539.4	582.9	600.3	587.3	543.8	495.9	452.4	439.4
82.5°	300.2	304.5	343.7	369.8	408.9	422.0	413.3	374.1	335.0	291.5	287.1
85°	134.9	139.2	174.0	195.8	226.2	239.3	230.6	195.8	165.3	126.2	117.5
87.5°	13.1	13.1	13.1	13.1	13.1	17.4	17.4	13.1	13.1	13.1	13.1
90°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
92.5°	5.0	5.0	5.0	7.0	8.0	7.0	8.0	6.0	6.0	5.0	5.0
95°	6.0	6.0	7.0	9.0	11.0	12.0	12.0	7.0	7.0	6.0	6.0
97.5°	8.0	9.0	9.0	11.0	18.0	33.0	20.0	10.0	10.0	9.0	8.0
100°	13.0	14.0	14.0	25.0	53.0	71.1	51.0	26.0	19.0	14.0	14.0
102.5°	42.0	44.0	54.0	81.1	120.1	109.1	92.1	87.1	60.0	48.0	46.0
105°	107.1	106.1	114.1	135.1	168.1	165.1	152.1	138.1	119.1	110.1	110.1
107.5°	141.1	141.1	148.1	166.1	191.1	223.2	226.2	179.1	157.1	147.1	146.1
110°	159.1	159.1	165.1	180.1	213.2	258.2	256.2	221.2	194.1	181.1	179.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	163.1	164.1	172.1	195.1	231.2	251.2	242.2	228.2	216.2	206.2	204.2
115°	169.1	169.1	178.1	200.2	220.2	228.2	218.2	207.2	199.2	195.1	197.1
117.5°	167.1	170.1	172.1	184.1	197.1	203.2	198.1	183.1	177.1	175.1	172.1
120°	155.1	155.1	157.1	163.1	170.1	173.1	171.1	161.1	156.1	155.1	153.1
122.5°	138.1	139.1	138.1	141.1	146.1	149.1	147.1	139.1	137.1	137.1	135.1
125°	121.1	121.1	120.1	122.1	125.1	124.1	125.1	121.1	120.1	120.1	119.1
127.5°	109.1	108.1	106.1	107.1	108.1	108.1	109.1	105.1	106.1	107.1	106.1
130°	97.1	97.1	95.1	95.1	95.1	93.1	95.1	93.1	94.1	95.1	96.1
132.5°	86.1	86.1	83.1	82.1	82.1	82.1	83.1	82.1	84.1	86.1	86.1
135°	77.1	77.1	74.1	75.1	75.1	74.1	75.1	74.1	76.1	77.1	77.1
137.5°	70.1	70.1	68.1	68.1	68.1	67.1	68.1	68.1	69.1	71.1	72.1
140°	64.0	64.0	63.0	63.0	62.0	63.0	63.0	63.0	64.0	65.0	65.0
142.5°	61.0	60.0	59.0	58.0	59.0	59.0	59.0	58.0	59.0	61.0	61.0
145°	56.0	56.0	55.0	55.0	55.0	56.0	55.0	55.0	56.0	56.0	57.0
147.5°	53.0	53.0	52.0	53.0	53.0	53.0	53.0	52.0	53.0	53.0	54.0
150°	52.0	51.0	50.0	51.0	51.0	50.0	50.0	50.0	50.0	51.0	51.0
152.5°	49.0	49.0	48.0	49.0	48.0	48.0	48.0	48.0	48.0	49.0	50.0
155°	47.0	47.0	46.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
157.5°	45.0	46.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	46.0	46.0
160°	44.0	44.0	44.0	44.0	43.0	43.0	43.0	44.0	44.0	44.0	45.0
162.5°	43.0	43.0	43.0	43.0	42.0	42.0	42.0	42.0	43.0	43.0	44.0
165°	43.0	42.0	42.0	42.0	41.0	41.0	41.0	41.0	42.0	43.0	42.0
167.5°	41.0	41.0	41.0	41.0	41.0	40.0	40.0	41.0	41.0	41.0	42.0
170°	41.0	41.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	41.0
172.5°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	40.0	40.0	41.0	41.0
175°	41.0	41.0	41.0	41.0	40.0	40.0	40.0	41.0	41.0	41.0	40.0
177.5°	41.0	41.0	41.0	41.0	40.0	41.0	41.0	41.0	41.0	41.0	41.0
180°	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0

(END OF REPORT)