

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: P833570

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833570
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-RW-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5740.7 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

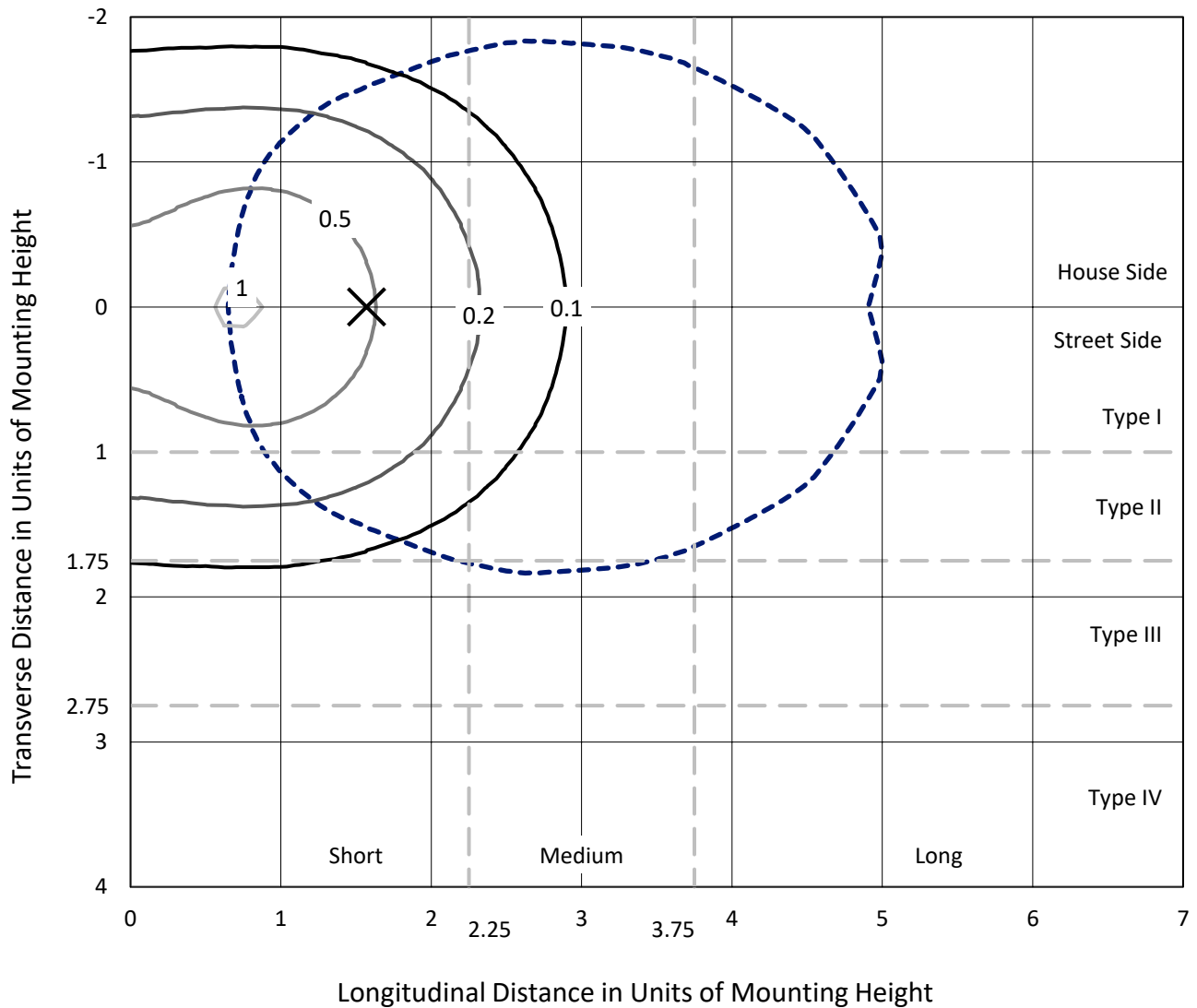
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

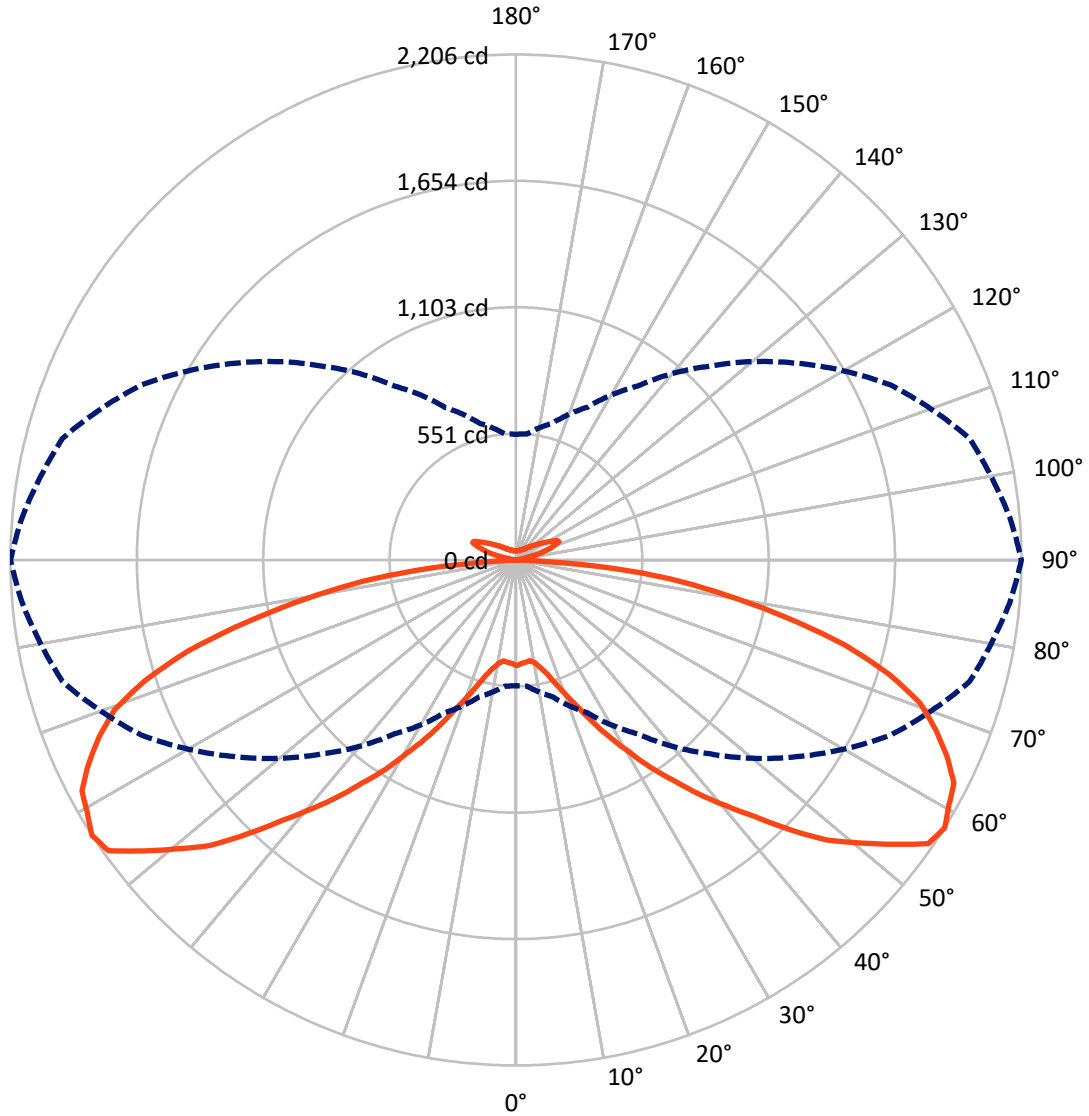
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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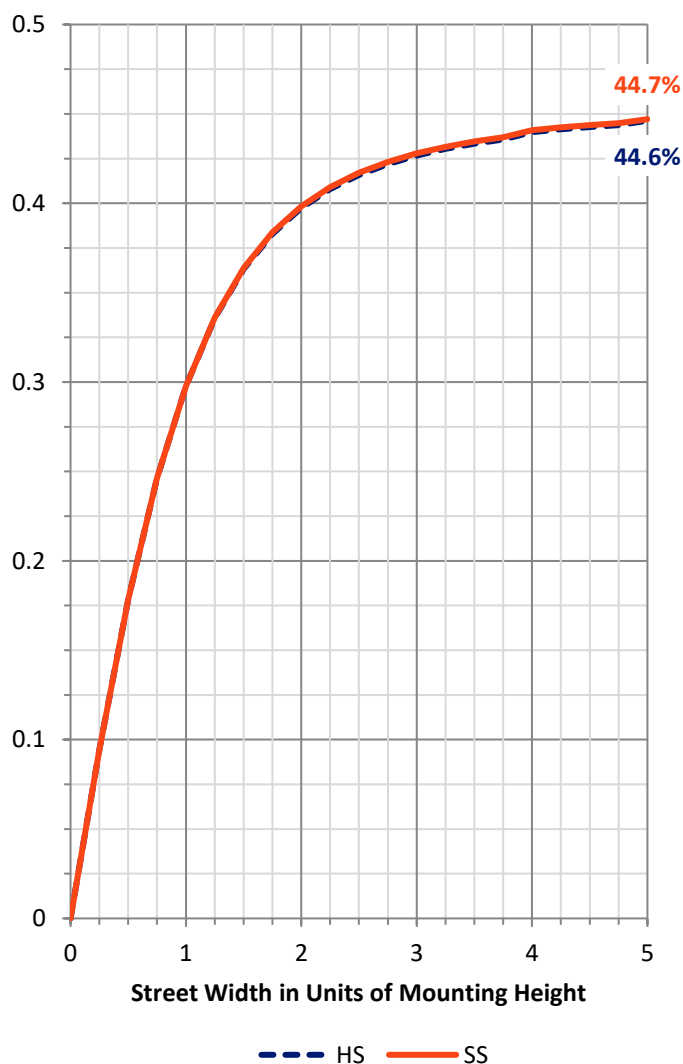
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2577.9	292.5	2870.3
	% Fixture	44.9	5.1	50.0
Street Side	Lumens	2577.9	292.5	2870.3
	% Fixture	44.9	5.1	50.0
Total	Lumens	5155.8	584.9	5740.7
	% Fixture	89.8	10.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	0.8
10°-20°	138.2	2.4
20°-30°	288.4	5.0
30°-40°	517.3	9.0
40°-50°	826.5	14.4
50°-60°	1131.6	19.7
60°-70°	1167.2	20.3
70°-80°	830.0	14.5
80°-90°	213.3	3.7
90°-100°	13.1	0.2
100°-110°	132.7	2.3
110°-120°	194.0	3.4
120°-130°	112.6	2.0
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°	5155.8	89.8
0°-180°	5740.7	100.0

Coefficient of Utilization

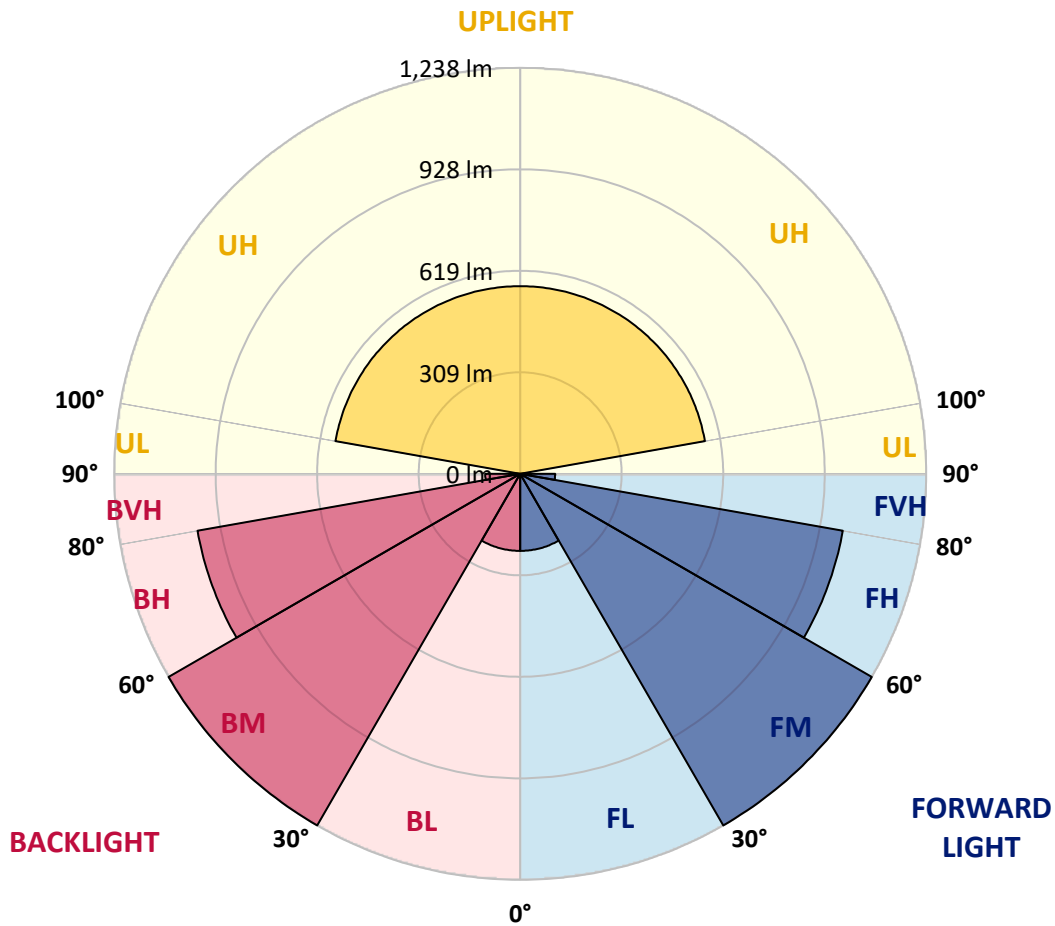


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	235.0	4.1			
FM (30°-60°)	1237.7	21.6			
FH (60°-80°)	998.6	17.4			G1/1800
FVH (80°-90°)	106.6	1.9			G2/225
BL (0°-30°)	235.0	4.1	B1/500		
BM (30°-60°)	1237.7	21.6	B2/2500		
BH (60°-80°)	998.6	17.4	B2/1000		G2/1000
BVH (80°-90°)	106.6	1.9			G2/225
UL (90°-100°)	13.1	0.2		U2/50	
UH (100°-180°)	571.8	10.0		U4/1000	

BUG Rating: B2-U4-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1
2.5°	461.1	461.1	456.8	456.8	456.8	452.4	452.4	452.4	452.4	448.1	452.4
5°	461.1	461.1	461.1	461.1	456.8	452.4	452.4	452.4	448.1	448.1	448.1
7.5°	456.8	456.8	456.8	456.8	452.4	448.1	448.1	448.1	443.7	443.7	443.7
10°	452.4	456.8	452.4	452.4	448.1	448.1	452.4	452.4	456.8	456.8	456.8
12.5°	448.1	448.1	448.1	452.4	452.4	456.8	465.5	474.2	478.5	482.9	482.9
15°	448.1	448.1	452.4	456.8	465.5	474.2	487.2	500.3	509.0	517.7	517.7
17.5°	448.1	448.1	452.4	465.5	478.5	495.9	517.7	535.1	552.5	565.5	569.9
20°	448.1	448.1	456.8	474.2	500.3	526.4	556.8	582.9	609.0	630.8	630.8
22.5°	452.4	456.8	465.5	487.2	526.4	565.5	604.7	643.8	674.3	700.4	700.4
25°	461.1	461.1	474.2	509.0	556.8	609.0	665.6	713.5	752.6	787.4	787.4
27.5°	465.5	469.8	487.2	530.7	591.6	656.9	735.2	791.8	844.0	874.4	878.8
30°	474.2	478.5	504.6	548.1	622.1	704.8	796.1	874.4	931.0	961.4	970.1
32.5°	478.5	482.9	517.7	569.9	652.5	748.3	852.7	952.7	1031.0	1065.8	1078.9
35°	491.6	495.9	530.7	591.6	687.4	796.1	917.9	1035.4	1126.7	1170.2	1178.9
37.5°	504.6	509.0	543.8	613.4	722.2	848.3	987.5	1122.4	1226.8	1279.0	1296.4
40°	513.3	517.7	556.8	639.5	761.3	904.9	1065.8	1213.7	1331.2	1396.5	1409.5
42.5°	526.4	530.7	574.2	661.3	796.1	961.4	1148.5	1313.8	1440.0	1513.9	1531.3
45°	539.4	543.8	591.6	687.4	835.3	1022.3	1231.1	1431.3	1574.8	1661.8	1679.2
47.5°	552.5	556.8	609.0	713.5	874.4	1083.2	1318.2	1535.7	1709.7	1792.3	1827.1
50°	556.8	565.5	617.7	730.9	900.5	1135.4	1392.1	1640.1	1822.8	1931.5	1940.2
52.5°	561.2	569.9	626.4	743.9	922.3	1174.6	1453.0	1727.1	1940.2	2070.8	2062.1
55°	565.5	565.5	626.4	743.9	931.0	1200.7	1496.5	1783.6	2018.6	2123.0	2183.9
57.5°	548.1	552.5	617.7	735.2	926.6	1196.3	1496.5	1805.4	2049.0	2162.1	2205.6
60°	526.4	535.1	596.0	713.5	909.2	1183.3	1487.8	1796.7	2062.1	2183.9	2170.8
62.5°	495.9	513.3	565.5	683.0	883.1	1152.8	1474.8	1774.9	2031.6	2157.8	2144.7
65°	461.1	478.5	526.4	652.5	826.6	1078.9	1405.2	1731.4	1948.9	2092.5	2066.4
67.5°	426.3	439.4	487.2	600.3	761.3	1000.6	1313.8	1635.7	1831.5	1988.1	1975.0
70°	387.2	391.5	439.4	539.4	696.1	922.3	1226.8	1500.9	1727.1	1844.5	1870.6
72.5°	339.3	339.3	387.2	474.2	617.7	817.9	1109.3	1348.6	1561.8	1661.8	1701.0
75°	278.4	282.8	321.9	400.2	517.7	700.4	944.0	1187.6	1366.0	1470.4	1483.5
77.5°	217.5	221.9	252.3	317.6	417.6	565.5	778.7	970.1	1139.8	1231.1	1205.0
80°	156.6	161.0	182.7	230.6	308.9	422.0	600.3	770.0	891.8	965.8	931.0
82.5°	95.7	100.1	113.1	143.6	195.8	274.1	408.9	535.1	630.8	691.7	678.7
85°	47.9	47.9	56.6	65.3	82.7	121.8	195.8	269.7	343.7	387.2	374.1
87.5°	8.7	13.1	13.1	13.1	13.1	8.7	13.1	13.1	13.1	21.8	8.7
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)