

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: P833567

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833567
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-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5419.7 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

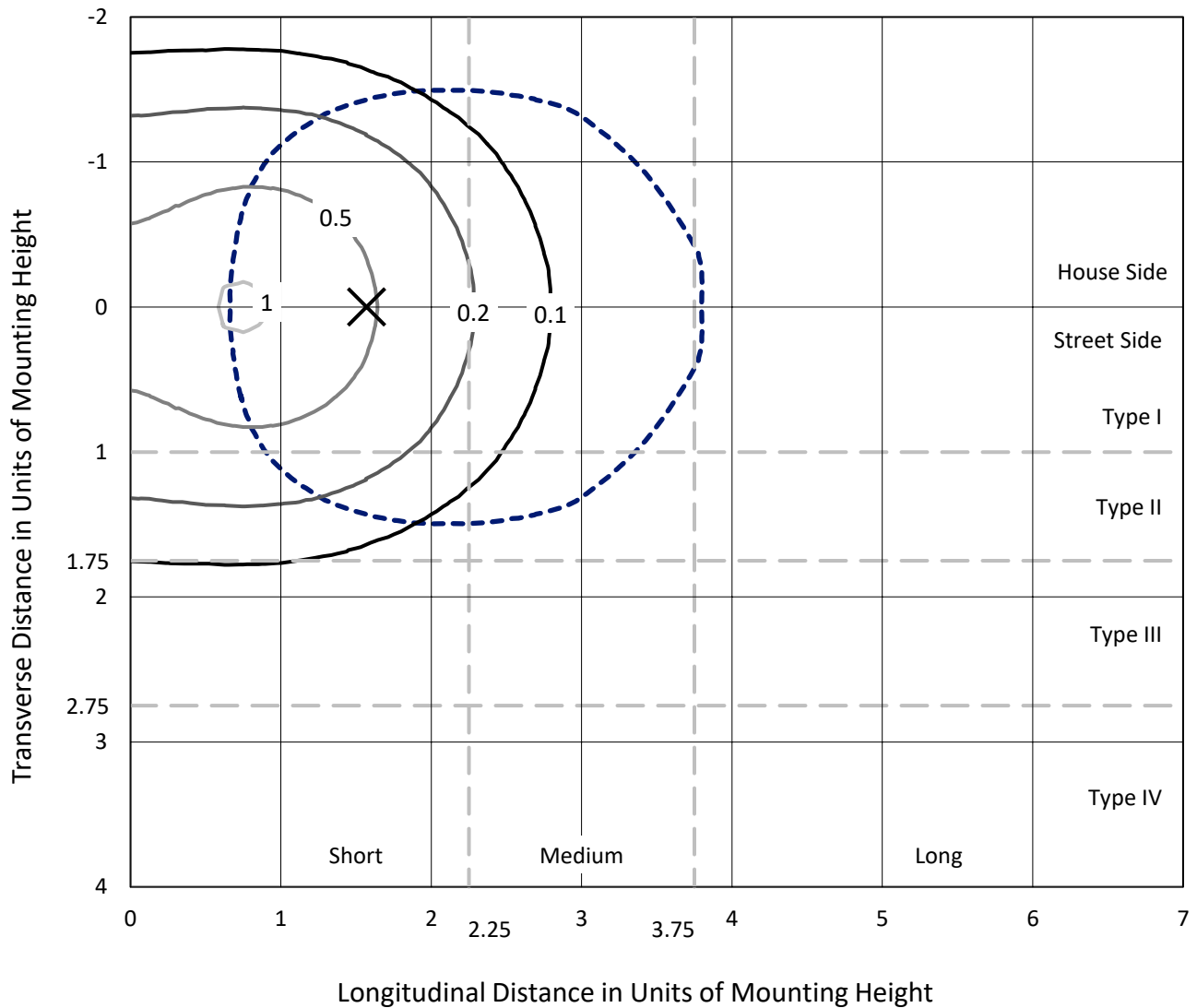
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

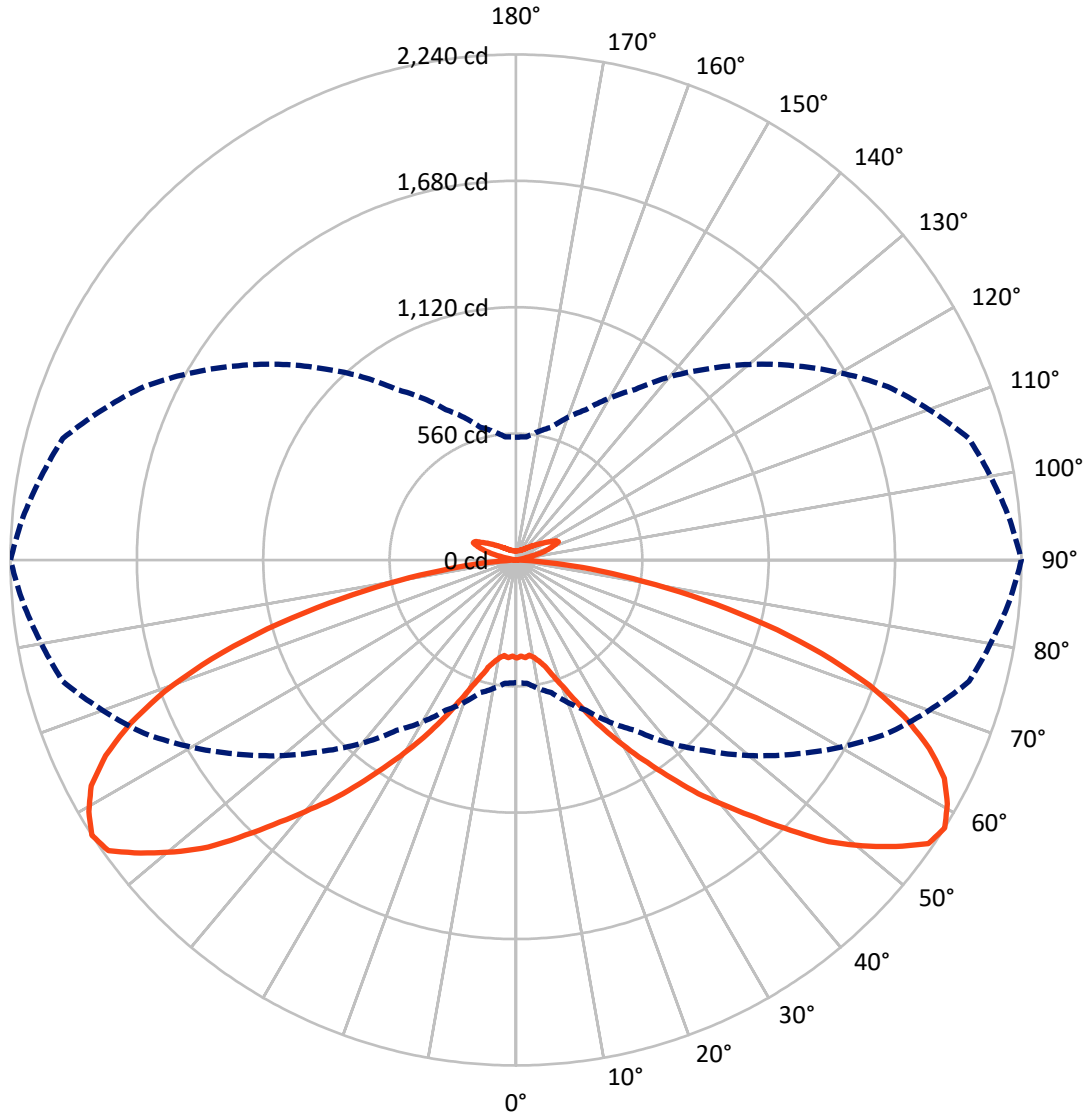
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P833567
CATALOG NUMBER: TTN-D2-740-U-RW-CG-UPL2

Luminous Intensity Polar Plot



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

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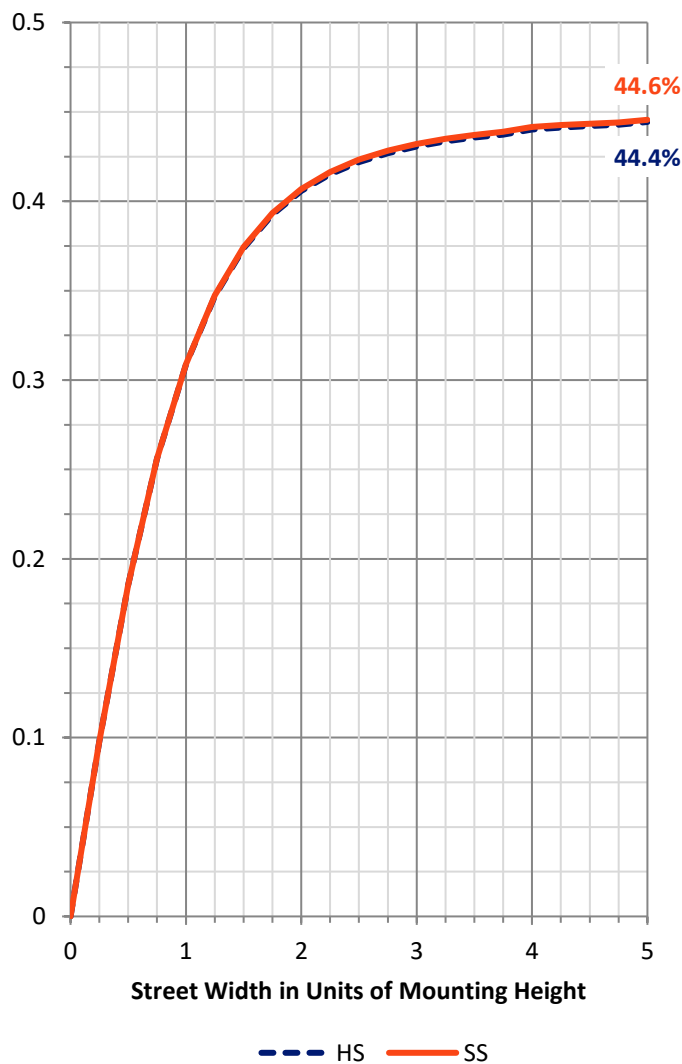
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2417.4	292.5	2709.8
	% Fixture	44.6	5.4	50.0
Street Side	Lumens	2417.4	292.5	2709.8
	% Fixture	44.6	5.4	50.0
Total	Lumens	4834.8	584.9	5419.7
	% Fixture	89.2	10.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	0.8
10°-20°	133.6	2.5
20°-30°	284.3	5.2
30°-40°	523.9	9.7
40°-50°	843.6	15.6
50°-60°	1141.8	21.1
60°-70°	1110.2	20.5
70°-80°	645.9	11.9
80°-90°	110.0	2.0
90°-100°	13.1	0.2
100°-110°	132.7	2.4
110°-120°	194.0	3.6
120°-130°	112.6	2.1
130°-140°	59.7	1.1
140°-150°	35.4	0.7
150°-160°	21.8	0.4
160°-170°	11.9	0.2
170°-180°	3.9	0.1
0°-90°	4834.8	89.2
0°-180°	5419.7	100.0

Coefficient of Utilization



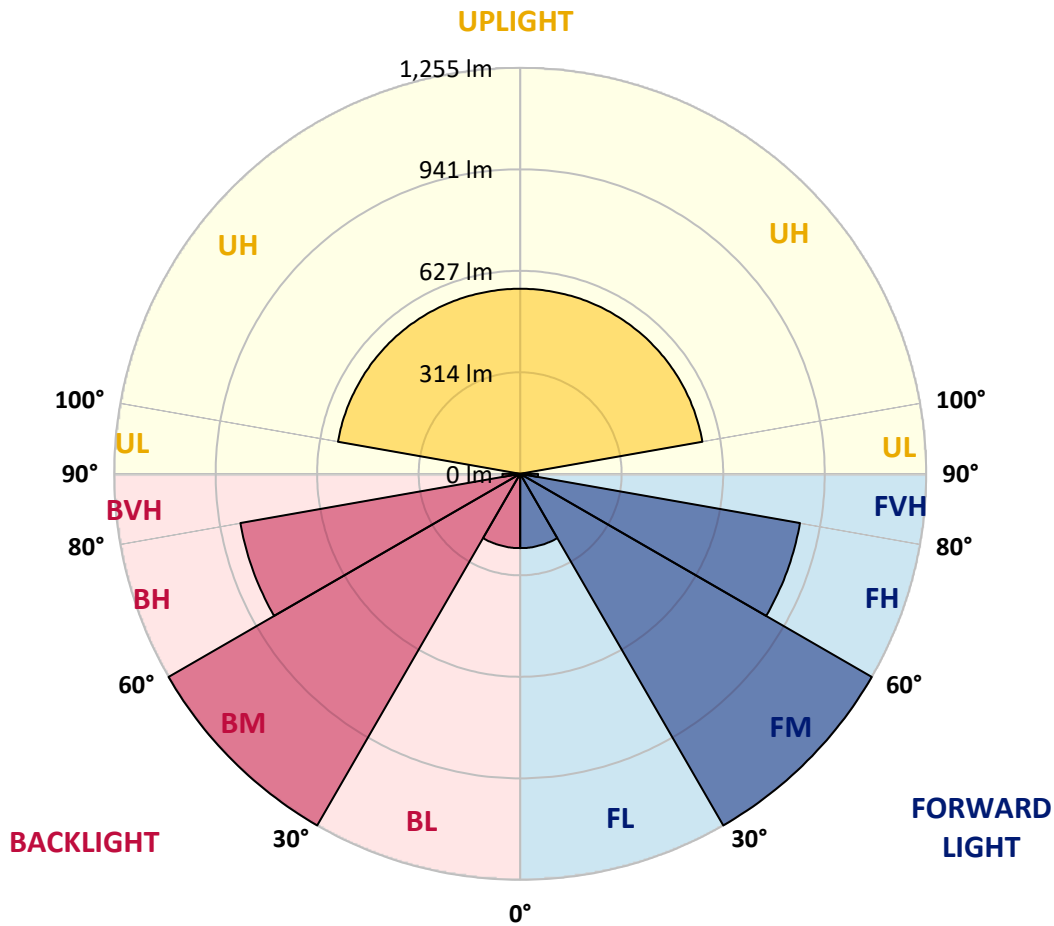
REPORT NUMBER: P833567
 CATALOG NUMBER: TTN-D2-740-U-RW-CG-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.6	4.2			
FM (30°-60°)	1254.7	23.2			
FH (60°-80°)	878.1	16.2			G1/1800
FVH (80°-90°)	55.0	1.0			G1/100
BL (0°-30°)	229.6	4.2	B1/500		
BM (30°-60°)	1254.7	23.2	B2/2500		
BH (60°-80°)	878.1	16.2	B2/1000		G2/1000
BVH (80°-90°)	55.0	1.0			G1/100
UL (90°-100°)	13.1	0.2		U2/50	
UH (100°-180°)	571.8	10.6		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°	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9
2.5°	434.9	434.9	434.9	434.9	430.6	430.6	430.6	426.2	426.2	426.2	426.2
5°	434.9	434.9	434.9	439.3	439.3	439.3	434.9	434.9	434.9	434.9	434.9
7.5°	434.9	439.3	439.3	434.9	434.9	430.6	430.6	430.6	426.2	426.2	426.2
10°	434.9	434.9	434.9	434.9	430.6	430.6	434.9	434.9	439.3	439.3	439.3
12.5°	430.6	430.6	434.9	434.9	434.9	439.3	448.0	452.3	456.7	461.0	461.0
15°	434.9	434.9	439.3	443.6	448.0	456.7	469.7	482.8	491.5	495.8	491.5
17.5°	434.9	439.3	443.6	452.3	465.4	478.4	500.2	517.6	535.0	539.3	543.7
20°	443.6	443.6	448.0	465.4	487.1	508.9	539.3	569.8	591.5	600.2	600.2
22.5°	448.0	452.3	456.7	478.4	513.2	548.0	591.5	626.3	656.8	674.2	678.5
25°	461.0	461.0	469.7	500.2	543.7	595.9	652.4	704.6	743.7	765.5	769.8
27.5°	469.7	474.1	487.1	526.3	582.8	648.1	726.3	787.2	835.1	861.2	865.5
30°	478.4	482.8	508.9	552.4	622.0	700.2	791.6	869.9	930.8	961.2	965.6
32.5°	491.5	495.8	526.3	574.1	656.8	752.4	856.8	952.5	1039.5	1065.6	1069.9
35°	504.5	508.9	543.7	600.2	695.9	804.6	926.4	1039.5	1143.9	1178.7	1187.4
37.5°	517.6	521.9	556.7	626.3	735.0	861.2	1004.7	1139.5	1252.6	1300.5	1313.5
40°	530.6	535.0	574.1	652.4	774.2	922.1	1087.3	1235.2	1365.7	1422.2	1430.9
42.5°	539.3	543.7	587.2	674.2	813.3	978.6	1174.3	1339.6	1478.8	1552.7	1561.4
45°	552.4	556.7	604.6	704.6	848.1	1043.8	1257.0	1457.0	1618.0	1700.6	1709.3
47.5°	561.1	565.4	617.6	722.0	887.3	1104.7	1344.0	1561.4	1752.8	1839.8	1865.9
50°	565.4	569.8	626.3	739.4	913.4	1148.2	1413.5	1665.8	1870.2	1979.0	1992.0
52.5°	565.4	574.1	630.7	752.4	930.8	1187.4	1470.1	1752.8	1983.3	2105.1	2109.4
55°	561.1	565.4	626.3	748.1	939.5	1204.8	1509.2	1805.0	2061.6	2179.0	2218.2
57.5°	543.7	548.0	608.9	735.0	922.1	1196.1	1500.5	1818.0	2079.0	2192.1	2239.9
60°	517.6	526.3	582.8	704.6	896.0	1165.6	1474.4	1791.9	2052.9	2192.1	2196.4
62.5°	487.1	491.5	548.0	665.5	856.8	1117.8	1426.6	1739.7	1992.0	2135.5	2131.2
65°	443.6	448.0	495.8	617.6	787.2	1026.4	1330.9	1657.1	1874.6	2026.8	2013.8
67.5°	395.8	400.1	443.6	552.4	704.6	926.4	1200.4	1517.9	1709.3	1865.9	1857.2
70°	343.6	343.6	382.7	474.1	617.6	813.3	1056.9	1335.3	1526.6	1657.1	1661.5
72.5°	282.7	282.7	317.5	395.8	517.6	682.8	891.6	1139.5	1296.1	1409.2	1417.9
75°	221.8	217.5	247.9	313.2	408.8	543.7	704.6	917.7	1039.5	1148.2	1143.9
77.5°	156.6	156.6	174.0	226.2	295.8	404.5	521.9	691.5	774.2	865.5	848.1
80°	100.0	100.0	108.7	147.9	195.7	269.7	343.6	469.7	526.3	595.9	574.1
82.5°	52.2	47.8	56.5	78.3	104.4	147.9	191.4	274.0	300.1	352.3	334.9
85°	17.4	17.4	17.4	26.1	39.1	56.5	73.9	117.4	121.8	156.6	143.5
87.5°	4.3	0.0	0.0	4.3	4.3	4.3	4.3	13.0	13.0	26.1	17.4
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)