

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: P833573

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

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833573  
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-CG-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

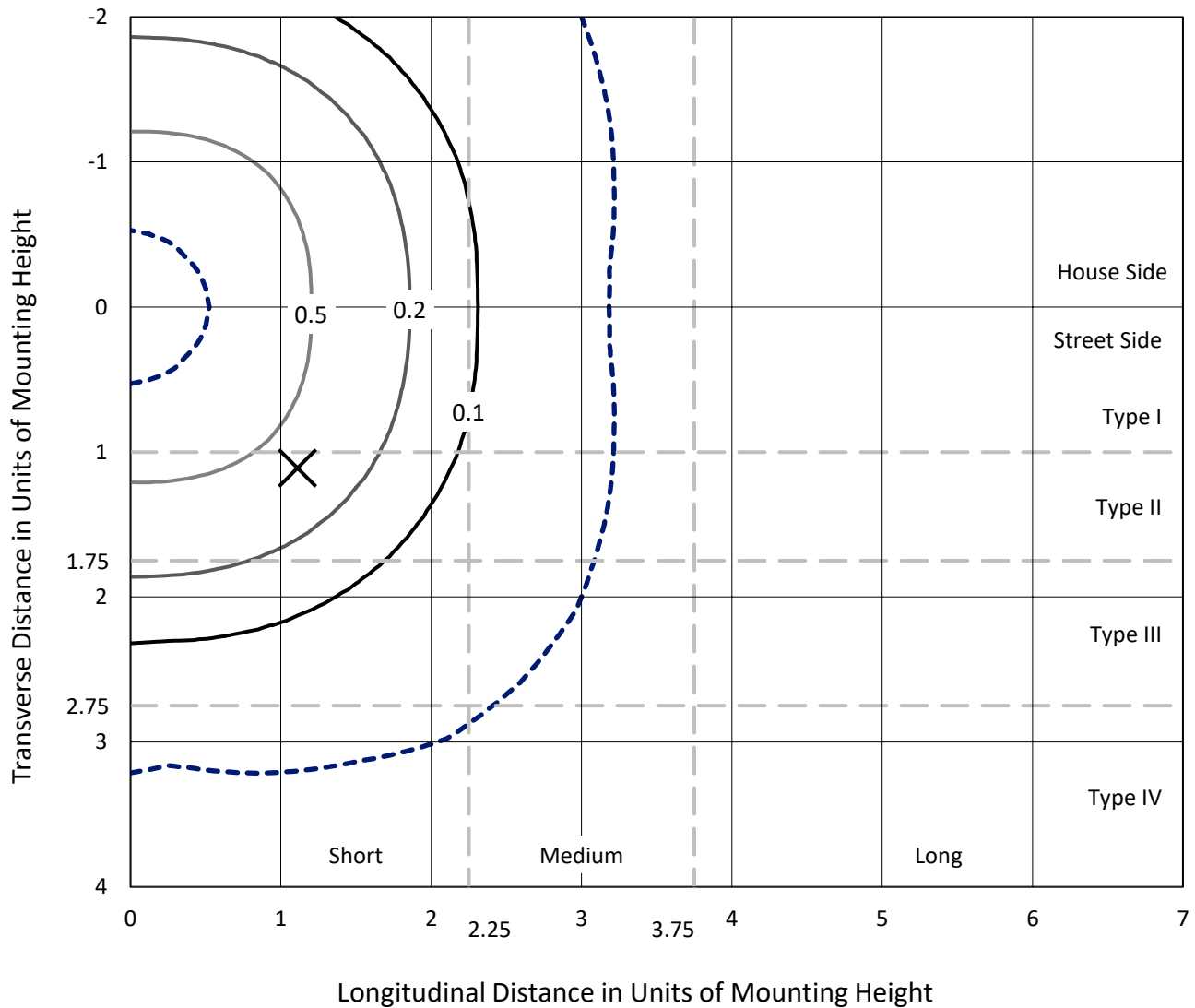
Lumens per Lamp: N/A  
Luminaire Lumens: 5606.7 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

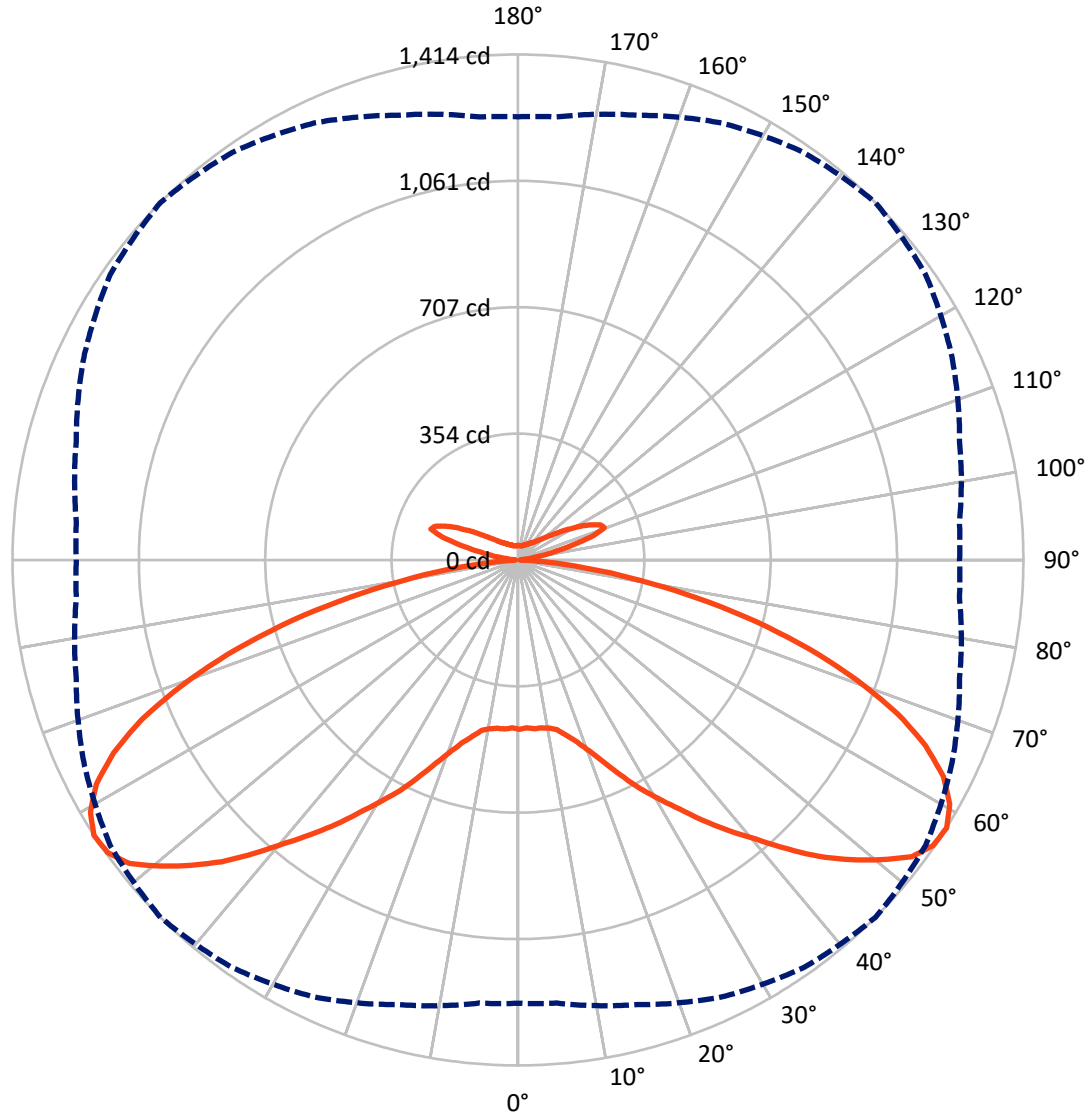
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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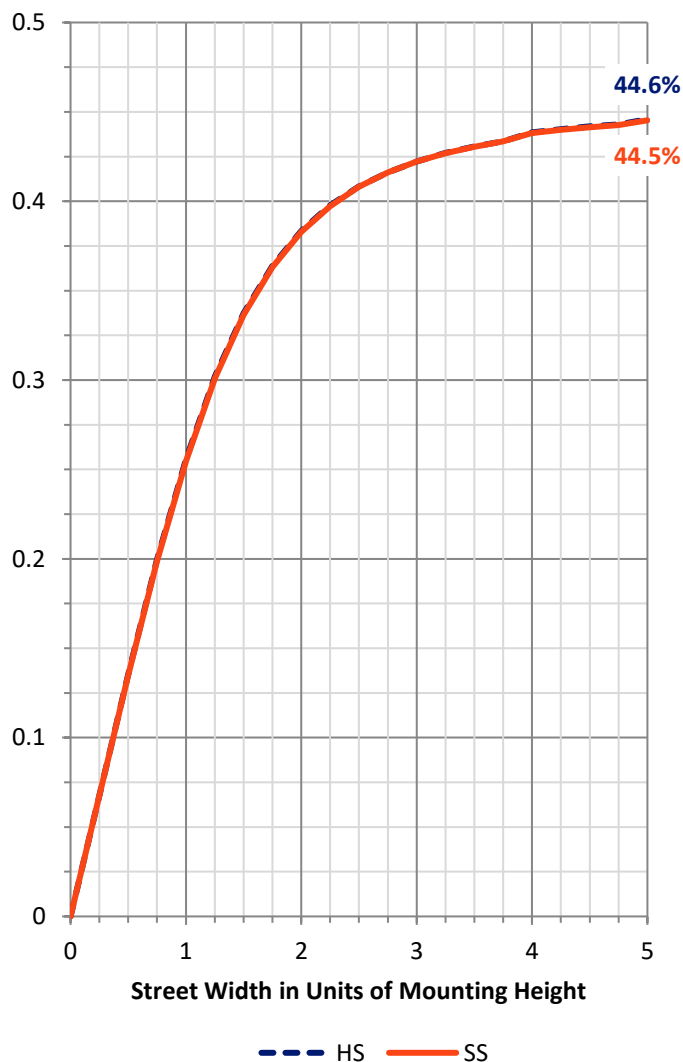
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2510.9	292.5	2803.3
	% Fixture	44.8	5.2	50.0
<b>Street Side</b>	Lumens	2510.9	292.5	2803.3
	% Fixture	44.8	5.2	50.0
<b>Total</b>	Lumens	5021.8	584.9	5606.7
	% Fixture	89.6	10.4	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.2	0.8
10°-20°	146.3	2.6
20°-30°	307.7	5.5
30°-40°	554.7	9.9
40°-50°	881.8	15.7
50°-60°	1176.5	21.0
60°-70°	1136.7	20.3
70°-80°	658.7	11.7
80°-90°	114.3	2.0
90°-100°	13.1	0.2
100°-110°	132.7	2.4
110°-120°	194.0	3.5
120°-130°	112.6	2.0
130°-140°	59.7	1.1
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°	5021.8	89.6
0°-180°	5606.7	100.0

**Coefficient of Utilization**



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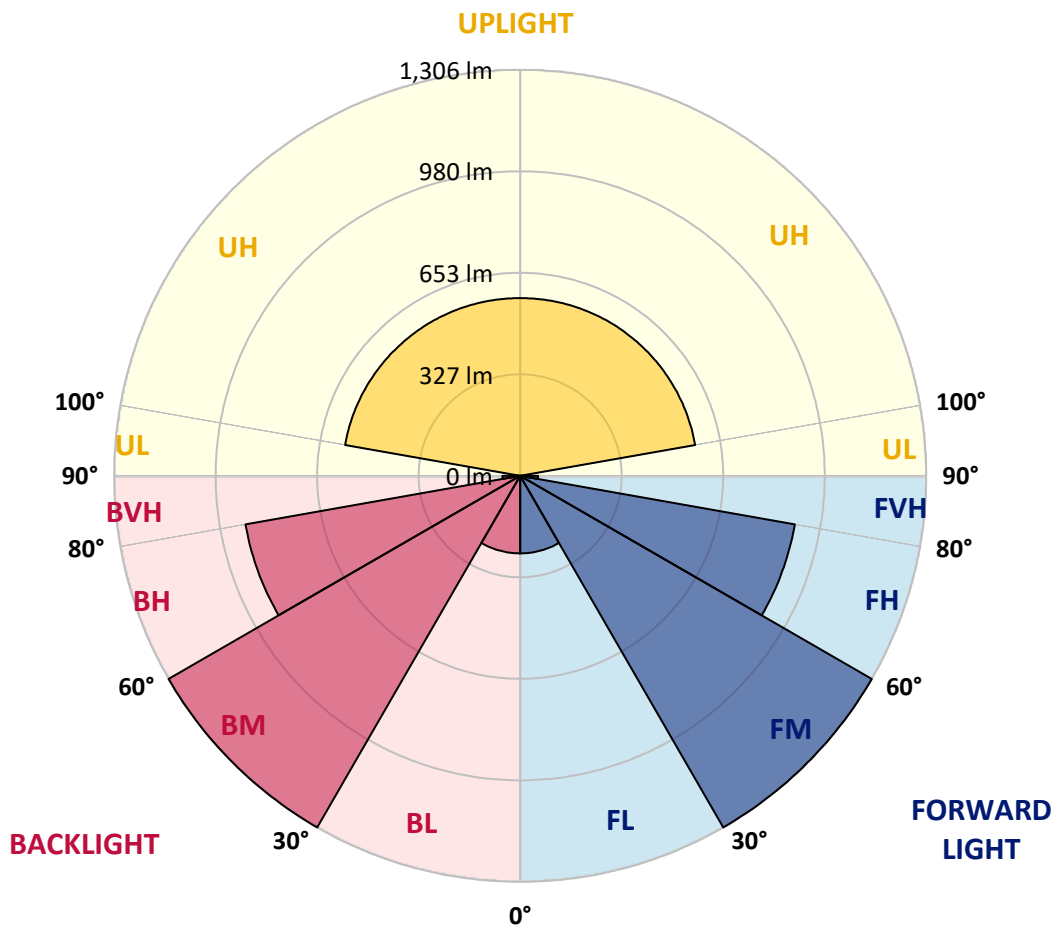
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	249.6	4.5			
FM (30°-60°)	1306.5	23.3			
FH (60°-80°)	897.7	16.0			G1/1800
FVH (80°-90°)	57.2	1.0			G1/100
BL (0°-30°)	249.6	4.5	B1/500		
BM (30°-60°)	1306.5	23.3	B2/2500		
BH (60°-80°)	897.7	16.0	B2/1000		G1/1800
BVH (80°-90°)	57.2	1.0			G1/100
UL (90°-100°)	13.1	0.2		U2/50	
UH (100°-180°)	571.8	10.2		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°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
2.5°	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0	470.0
5°	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3	474.3
7.5°	470.0	470.0	474.3	474.3	474.3	474.3	474.3	474.3	474.3	470.0	470.0
10°	474.3	474.3	474.3	478.7	478.7	478.7	478.7	478.7	474.3	474.3	474.3
12.5°	483.0	483.0	487.4	487.4	487.4	487.4	487.4	487.4	487.4	483.0	483.0
15°	504.8	504.8	504.8	509.1	509.1	509.1	509.1	509.1	504.8	504.8	504.8
17.5°	526.5	526.5	530.9	530.9	535.2	535.2	535.2	530.9	530.9	530.9	530.9
20°	557.0	557.0	561.4	561.4	565.7	570.1	570.1	565.7	561.4	561.4	561.4
22.5°	596.2	600.5	600.5	600.5	604.9	613.6	609.2	604.9	600.5	600.5	600.5
25°	644.0	648.4	652.7	652.7	657.1	665.8	665.8	652.7	652.7	652.7	652.7
27.5°	700.6	705.0	709.3	709.3	713.7	722.4	718.0	709.3	709.3	705.0	705.0
30°	752.8	757.2	761.5	765.9	770.2	774.6	774.6	765.9	761.5	757.2	752.8
32.5°	805.0	805.0	813.7	822.4	831.1	831.1	835.5	822.4	813.7	805.0	800.7
35°	857.3	861.6	866.0	879.0	892.1	896.4	892.1	879.0	866.0	857.3	857.3
37.5°	913.8	918.2	922.5	939.9	953.0	961.7	953.0	939.9	922.5	913.8	909.5
40°	974.7	979.1	983.5	1005.2	1018.3	1027.0	1013.9	1000.9	983.5	974.7	970.4
42.5°	1031.3	1040.0	1048.7	1074.8	1096.6	1105.3	1092.2	1070.5	1053.1	1031.3	1027.0
45°	1100.9	1109.6	1122.7	1148.8	1170.6	1183.6	1166.2	1144.5	1118.4	1100.9	1096.6
47.5°	1157.5	1166.2	1179.3	1214.1	1244.5	1253.2	1235.8	1209.7	1174.9	1153.2	1148.8
50°	1201.0	1209.7	1235.8	1275.0	1309.8	1318.5	1301.1	1266.3	1227.1	1196.7	1192.3
52.5°	1235.8	1244.5	1275.0	1327.2	1366.4	1379.4	1357.7	1318.5	1266.3	1231.5	1227.1
55°	1253.2	1257.6	1296.8	1353.3	1392.5	1409.9	1388.1	1344.6	1288.1	1248.9	1244.5
57.5°	1240.2	1244.5	1288.1	1349.0	1392.5	1414.3	1392.5	1340.3	1279.4	1240.2	1235.8
60°	1214.1	1214.1	1253.2	1322.9	1375.1	1388.1	1366.4	1314.2	1248.9	1209.7	1205.4
62.5°	1166.2	1161.9	1209.7	1270.7	1322.9	1335.9	1318.5	1266.3	1201.0	1161.9	1157.5
65°	1074.8	1066.1	1135.8	1192.3	1240.2	1253.2	1240.2	1192.3	1131.4	1070.5	1061.8
67.5°	966.0	953.0	1018.3	1083.5	1127.1	1144.5	1127.1	1087.9	1018.3	957.3	953.0
70°	852.9	839.9	892.1	948.6	996.5	1005.2	987.8	948.6	883.4	844.2	844.2
72.5°	718.0	705.0	752.8	796.3	844.2	852.9	835.5	800.7	752.8	713.7	709.3
75°	570.1	557.0	600.5	635.3	683.2	687.5	678.8	639.7	600.5	561.4	561.4
77.5°	422.1	409.0	443.9	474.3	513.5	513.5	509.1	478.7	443.9	417.7	417.7
80°	278.5	269.8	300.3	313.3	348.1	348.1	343.8	322.0	295.9	278.5	274.1
82.5°	156.7	148.0	174.1	178.4	204.5	204.5	200.2	182.8	165.4	152.3	152.3
85°	60.9	52.2	69.6	74.0	87.0	87.0	82.7	78.3	65.3	56.6	56.6
87.5°	4.4	4.4	8.7	8.7	13.1	13.1	13.1	8.7	8.7	4.4	4.4
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)