

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: P833574

Luminaire Tested: **TTN-D2-740-U-WQ-CG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833574  
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-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

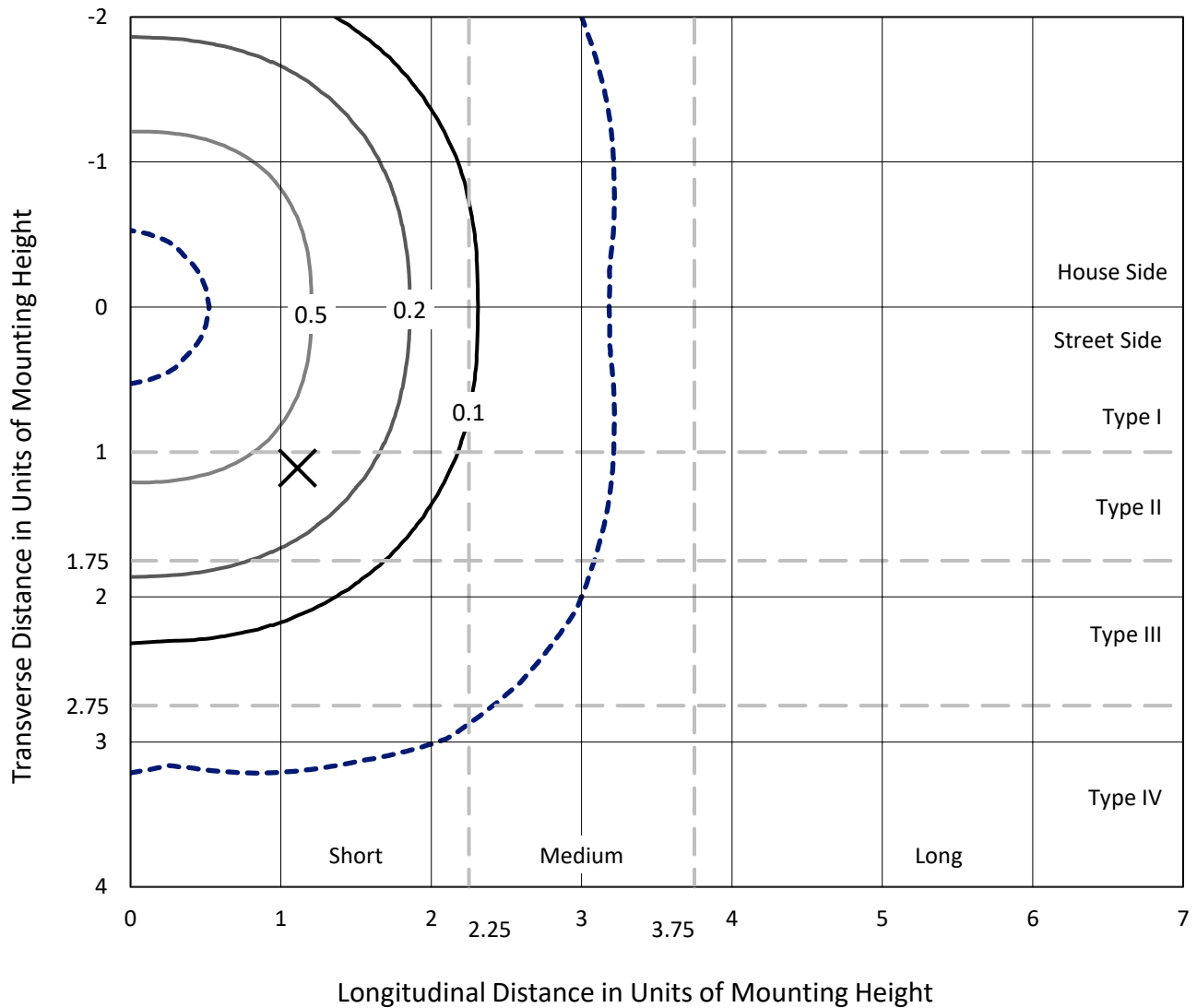
Lumens per Lamp: N/A  
Luminaire Lumens: 5833.6 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 49.5  
Input Voltage (V): NR  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

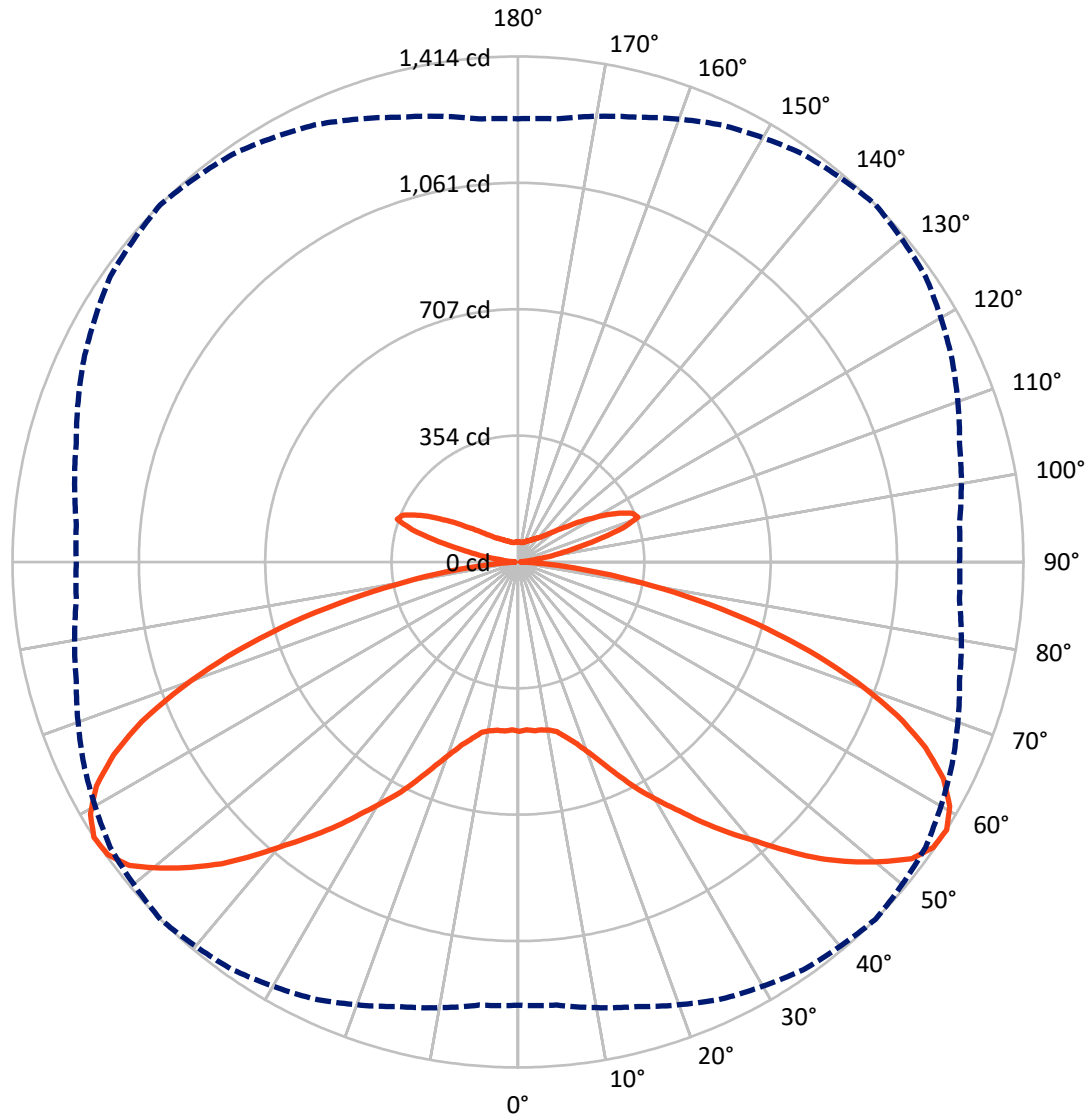
✕ Max cd  
 - - - 1/2 Max cd



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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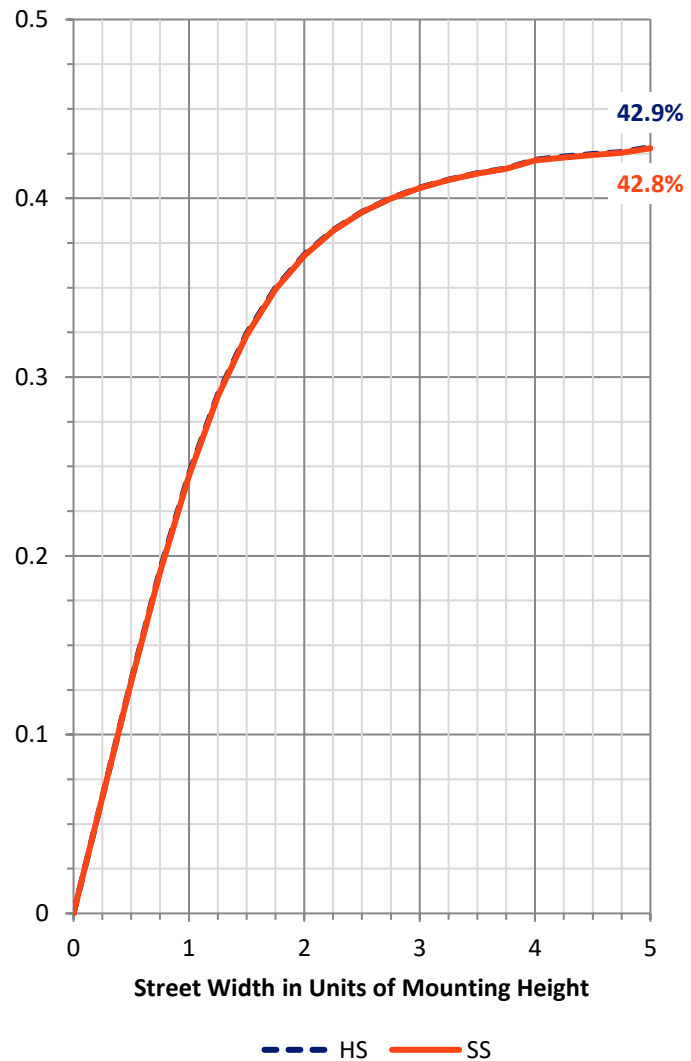
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2511.0	405.8	2916.8
	% Fixture	43.0	7.0	50.0
<b>Street Side</b>	Lumens	2511.0	405.8	2916.8
	% Fixture	43.0	7.0	50.0
<b>Total</b>	Lumens	5022.1	811.5	5833.6
	% Fixture	86.1	13.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.2	0.8
10°-20°	146.3	2.5
20°-30°	307.7	5.3
30°-40°	554.7	9.5
40°-50°	881.8	15.1
50°-60°	1176.5	20.2
60°-70°	1136.7	19.5
70°-80°	658.7	11.3
80°-90°	114.6	2.0
90°-100°	18.1	0.3
100°-110°	184.1	3.2
110°-120°	269.1	4.6
120°-130°	156.2	2.7
130°-140°	82.7	1.4
140°-150°	49.1	0.8
150°-160°	30.3	0.5
160°-170°	16.5	0.3
170°-180°	5.4	0.1
0°-90°	5022.1	86.1
0°-180°	5833.6	100.0

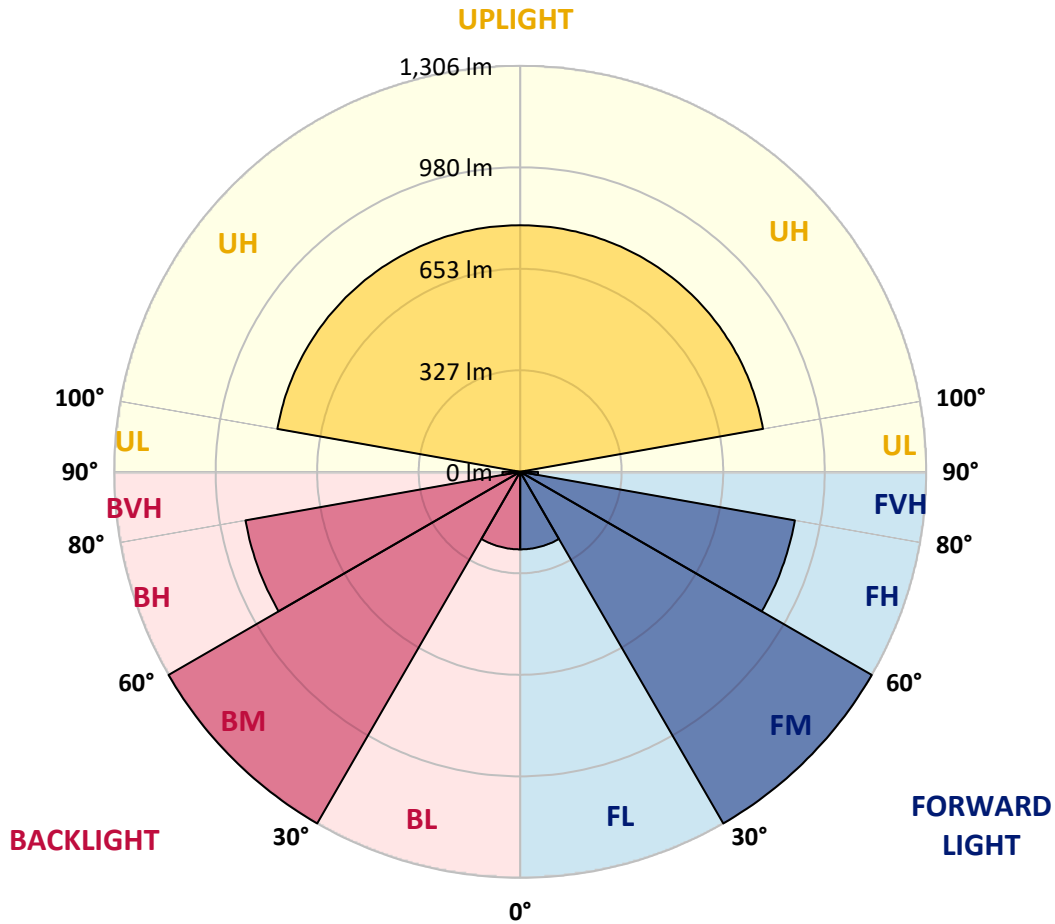


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	249.6	4.3			
FM (30°-60°)	1306.5	22.4			
FH (60°-80°)	897.7	15.4			G1/1800
FVH (80°-90°)	57.3	1.0			G1/100
BL (0°-30°)	249.6	4.3	B1/500		
BM (30°-60°)	1306.5	22.4	B2/2500		
BH (60°-80°)	897.7	15.4	B2/1000		G1/1800
BVH (80°-90°)	57.3	1.0			G1/100
UL (90°-100°)	18.1	0.3		U2/50	
UH (100°-180°)	793.4	13.6		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°	6.9	6.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9
92.5°	6.9	6.9	6.9	9.7	11.1	9.7	11.1	8.3	8.3	6.9	6.9
95°	8.3	8.3	9.7	12.5	15.3	16.7	16.7	9.7	9.7	8.3	8.3
97.5°	11.1	12.5	12.5	15.3	25.0	45.8	27.8	13.9	13.9	12.5	11.1
100°	18.0	19.4	19.4	34.7	73.6	98.6	70.8	36.1	26.4	19.4	19.4
102.5°	58.3	61.1	75.0	112.5	166.6	151.3	127.7	120.8	83.3	66.6	63.9
105°	148.6	147.2	158.3	187.4	233.3	229.1	211.0	191.6	165.2	152.7	152.7
107.5°	195.8	195.8	205.5	230.5	265.2	309.6	313.8	248.5	218.0	204.1	202.7
110°	220.8	220.8	229.1	249.9	295.7	358.2	355.4	306.8	269.4	251.3	248.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	226.3	227.7	238.8	270.7	320.7	348.5	336.0	316.6	299.9	286.0	283.2
115°	234.6	234.6	247.1	277.7	305.5	316.6	302.7	287.4	276.3	270.7	273.5
117.5°	231.9	236.0	238.8	255.5	273.5	281.8	274.9	254.1	245.8	243.0	238.8
120°	215.2	215.2	218.0	226.3	236.0	240.2	237.4	223.5	216.6	215.2	212.4
122.5°	191.6	193.0	191.6	195.8	202.7	206.9	204.1	193.0	190.2	190.2	187.4
125°	168.0	168.0	166.6	169.4	173.6	172.2	173.6	168.0	166.6	166.6	165.2
127.5°	151.3	149.9	147.2	148.6	149.9	149.9	151.3	145.8	147.2	148.6	147.2
130°	134.7	134.7	131.9	131.9	131.9	129.1	131.9	129.1	130.5	131.9	133.3
132.5°	119.4	119.4	115.2	113.9	113.9	113.9	115.2	113.9	116.6	119.4	119.4
135°	106.9	106.9	102.7	104.1	104.1	102.7	104.1	102.7	105.5	106.9	106.9
137.5°	97.2	97.2	94.4	94.4	94.4	93.0	94.4	94.4	95.8	98.6	100.0
140°	88.9	88.9	87.5	87.5	86.1	87.5	87.5	87.5	88.9	90.2	90.2
142.5°	84.7	83.3	81.9	80.5	81.9	81.9	81.9	80.5	81.9	84.7	84.7
145°	77.8	77.8	76.4	76.4	76.4	77.8	76.4	76.4	77.8	77.8	79.1
147.5°	73.6	73.6	72.2	73.6	73.6	73.6	73.6	72.2	73.6	73.6	75.0
150°	72.2	70.8	69.4	70.8	70.8	69.4	69.4	69.4	69.4	70.8	70.8
152.5°	68.0	68.0	66.6	68.0	66.6	66.6	66.6	66.6	66.6	68.0	69.4
155°	65.3	65.3	63.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
157.5°	62.5	63.9	62.5	62.5	62.5	62.5	62.5	62.5	62.5	63.9	63.9
160°	61.1	61.1	61.1	61.1	59.7	59.7	59.7	61.1	61.1	61.1	62.5
162.5°	59.7	59.7	59.7	59.7	58.3	58.3	58.3	58.3	59.7	59.7	61.1
165°	59.7	58.3	58.3	58.3	56.9	56.9	56.9	56.9	58.3	59.7	58.3
167.5°	56.9	56.9	56.9	56.9	56.9	55.5	55.5	56.9	56.9	56.9	58.3
170°	56.9	56.9	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.9
172.5°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	55.5	55.5	56.9	56.9
175°	56.9	56.9	56.9	56.9	55.5	55.5	55.5	56.9	56.9	56.9	55.5
177.5°	56.9	56.9	56.9	56.9	55.5	56.9	56.9	56.9	56.9	56.9	56.9
180°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9

(END OF REPORT)