

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: P833178

Luminaire Tested: **TTN-D1-735-U-RW-CG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833178  
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-D1-735-U-RW-CG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

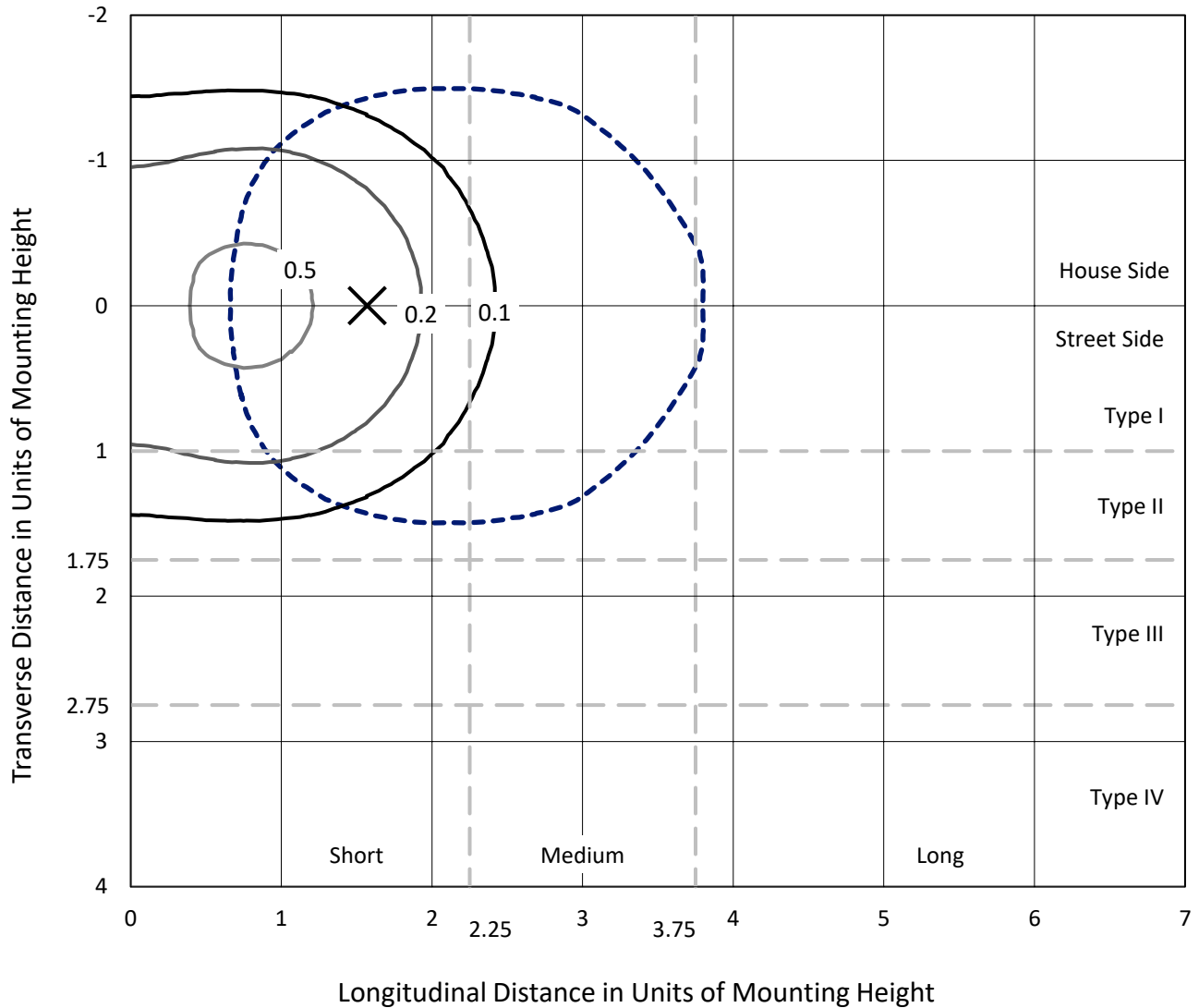
Lumens per Lamp: N/A  
Luminaire Lumens: 3666.7 lumens  
Efficiency: N/A  
Efficacy: 109.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type II - Short  
BUG Rating: B2 - U4 - G2  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

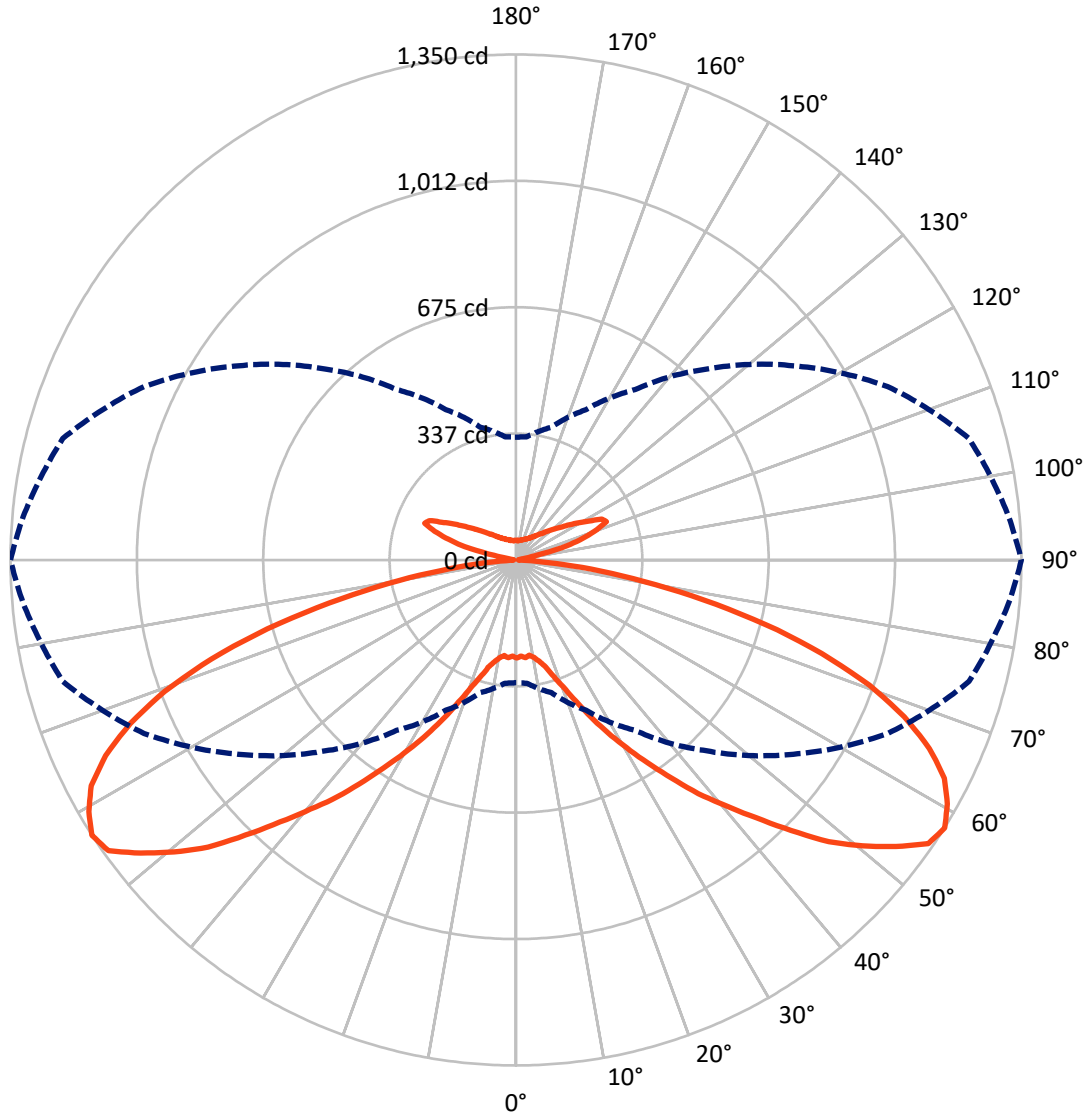
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 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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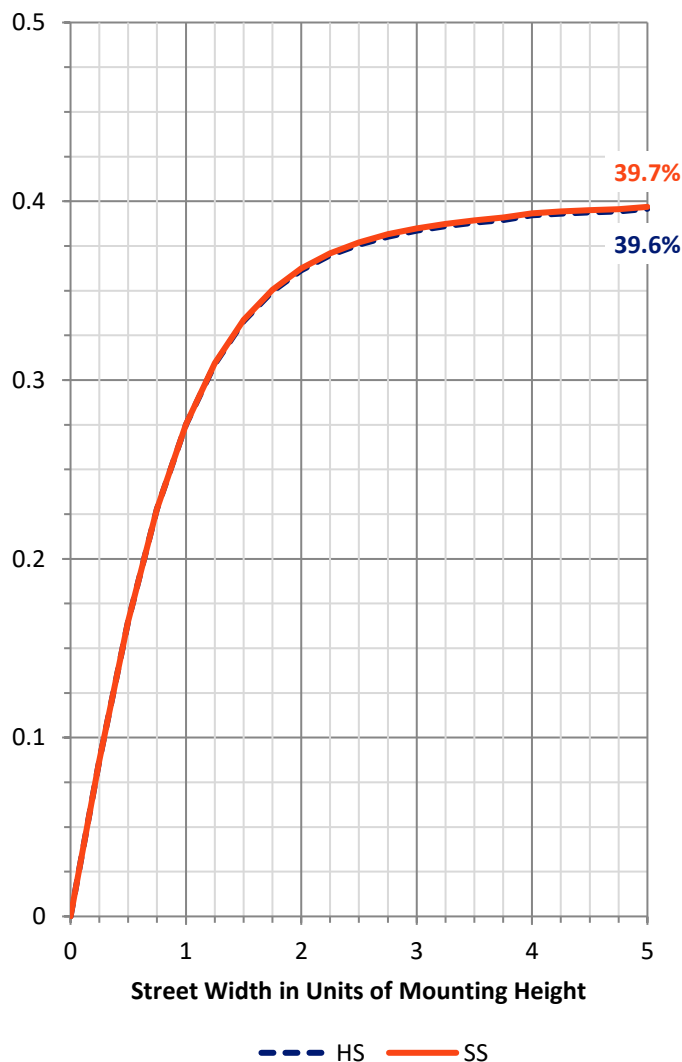
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1457.0	376.3	1833.3
	% Fixture	39.7	10.3	50.0
<b>Street Side</b>	Lumens	1457.0	376.3	1833.3
	% Fixture	39.7	10.3	50.0
<b>Total</b>	Lumens	2914.0	752.7	3666.7
	% Fixture	79.5	20.5	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.0	0.7
10°-20°	80.5	2.2
20°-30°	171.3	4.7
30°-40°	315.7	8.6
40°-50°	508.4	13.9
50°-60°	688.1	18.8
60°-70°	669.0	18.2
70°-80°	389.2	10.6
80°-90°	66.8	1.8
90°-100°	16.8	0.5
100°-110°	170.7	4.7
110°-120°	249.6	6.8
120°-130°	144.9	4.0
130°-140°	76.7	2.1
140°-150°	45.6	1.2
150°-160°	28.1	0.8
160°-170°	15.3	0.4
170°-180°	5.0	0.1
0°-90°	2914.0	79.5
0°-180°	3666.7	100.0

**Coefficient of Utilization**

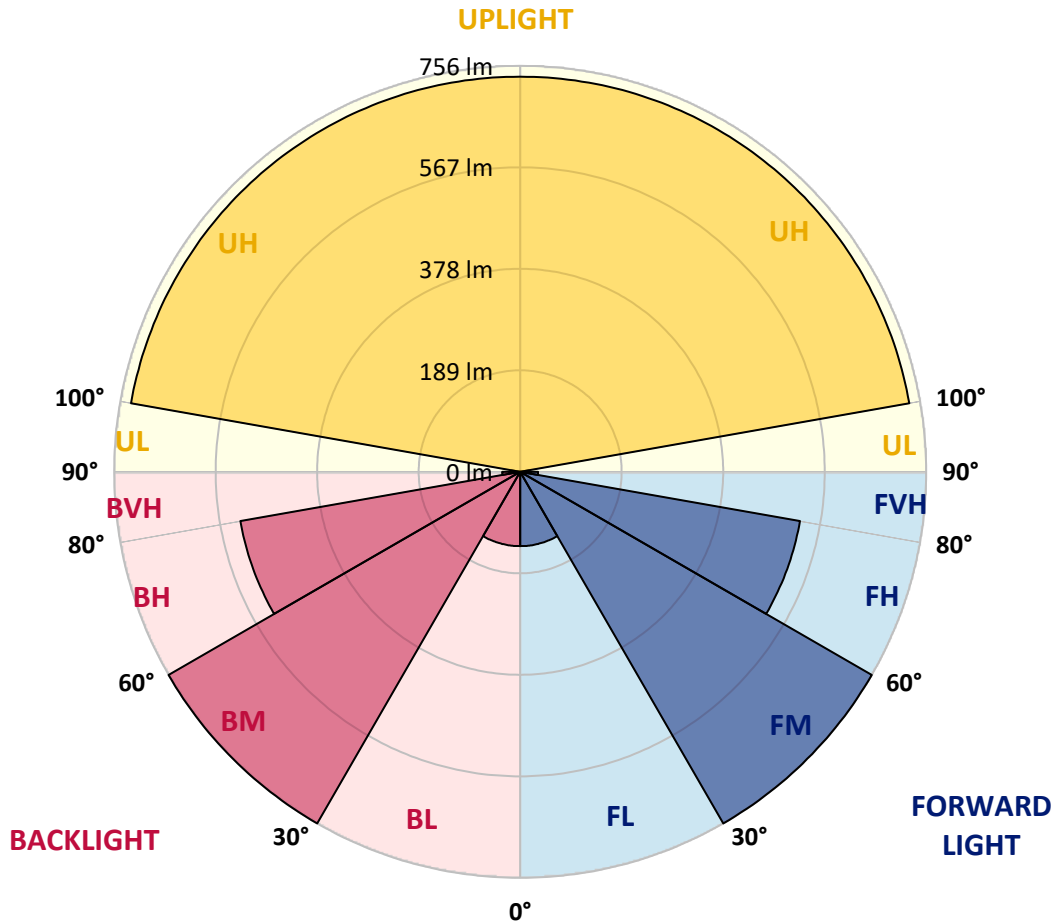


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.4	3.8			
FM (30°-60°)	756.1	20.6			
FH (60°-80°)	529.1	14.4			G0/660
FVH (80°-90°)	33.4	0.9			G1/100
BL (0°-30°)	138.4	3.8	B1/500		
BM (30°-60°)	756.1	20.6	B1/1000		
BH (60°-80°)	529.1	14.4	B2/1000		G2/1000
BVH (80°-90°)	33.4	0.9			G1/100
UL (90°-100°)	16.8	0.5		U2/50	
UH (100°-180°)	735.8	20.1		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°	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1	262.1
2.5°	262.1	262.1	262.1	262.1	259.5	259.5	259.5	256.9	256.9	256.9	256.9
5°	262.1	262.1	262.1	264.7	264.7	264.7	262.1	262.1	262.1	262.1	262.1
7.5°	262.1	264.7	264.7	262.1	262.1	259.5	259.5	259.5	256.9	256.9	256.9
10°	262.1	262.1	262.1	262.1	259.5	259.5	262.1	262.1	264.7	264.7	264.7
12.5°	259.5	259.5	262.1	262.1	262.1	264.7	270.0	272.6	275.2	277.8	277.8
15°	262.1	262.1	264.7	267.3	270.0	275.2	283.1	290.9	296.2	298.8	296.2
17.5°	262.1	264.7	267.3	272.6	280.4	288.3	301.4	311.9	322.4	325.0	327.6
20°	267.3	267.3	270.0	280.4	293.5	306.7	325.0	343.3	356.4	361.7	361.7
22.5°	270.0	272.6	275.2	288.3	309.3	330.2	356.4	377.4	395.8	406.2	408.9
25°	277.8	277.8	283.1	301.4	327.6	359.1	393.1	424.6	448.2	461.3	463.9
27.5°	283.1	285.7	293.5	317.1	351.2	390.5	437.7	474.4	503.2	518.9	521.6
30°	288.3	290.9	306.7	332.9	374.8	422.0	477.0	524.2	560.9	579.2	581.9
32.5°	296.2	298.8	317.1	346.0	395.8	453.4	516.3	574.0	626.4	642.1	644.8
35°	304.0	306.7	327.6	361.7	419.4	484.9	558.3	626.4	689.3	710.3	715.5
37.5°	311.9	314.5	335.5	377.4	442.9	518.9	605.4	686.7	754.8	783.7	791.5
40°	319.8	322.4	346.0	393.1	466.5	555.6	655.2	744.4	823.0	857.1	862.3
42.5°	325.0	327.6	353.8	406.2	490.1	589.7	707.7	807.3	891.1	935.7	940.9
45°	332.9	335.5	364.3	424.6	511.1	629.0	757.5	878.0	975.0	1024.8	1030.0
47.5°	338.1	340.7	372.2	435.1	534.7	665.7	809.9	940.9	1056.2	1108.7	1124.4
50°	340.7	343.3	377.4	445.6	550.4	691.9	851.8	1003.8	1127.0	1192.5	1200.4
52.5°	340.7	346.0	380.0	453.4	560.9	715.5	885.9	1056.2	1195.2	1268.5	1271.2
55°	338.1	340.7	377.4	450.8	566.1	726.0	909.5	1087.7	1242.3	1313.1	1336.7
57.5°	327.6	330.2	366.9	442.9	555.6	720.8	904.2	1095.6	1252.8	1321.0	1349.8
60°	311.9	317.1	351.2	424.6	539.9	702.4	888.5	1079.8	1237.1	1321.0	1323.6
62.5°	293.5	296.2	330.2	401.0	516.3	673.6	859.7	1048.4	1200.4	1286.9	1284.3
65°	267.3	270.0	298.8	372.2	474.4	618.5	802.0	998.6	1129.6	1221.4	1213.5
67.5°	238.5	241.1	267.3	332.9	424.6	558.3	723.4	914.7	1030.0	1124.4	1119.1
70°	207.1	207.1	230.6	285.7	372.2	490.1	636.9	804.6	920.0	998.6	1001.2
72.5°	170.4	170.4	191.3	238.5	311.9	411.5	537.3	686.7	781.0	849.2	854.4
75°	133.7	131.0	149.4	188.7	246.4	327.6	424.6	553.0	626.4	691.9	689.3
77.5°	94.4	94.4	104.8	136.3	178.2	243.7	314.5	416.7	466.5	521.6	511.1
80°	60.3	60.3	65.5	89.1	117.9	162.5	207.1	283.1	317.1	359.1	346.0
82.5°	31.5	28.8	34.1	47.2	62.9	89.1	115.3	165.1	180.8	212.3	201.8
85°	10.5	10.5	10.5	15.7	23.6	34.1	44.6	70.8	73.4	94.4	86.5
87.5°	2.6	0.0	0.0	2.6	2.6	2.6	2.6	7.9	7.9	15.7	10.5
90°	6.4	6.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.4	6.4
92.5°	6.4	6.4	6.4	9.0	10.3	9.0	10.3	7.7	7.7	6.4	6.4
95°	7.7	7.7	9.0	11.6	14.2	15.5	15.5	9.0	9.0	7.7	7.7
97.5°	10.3	11.6	11.6	14.2	23.2	42.5	25.8	12.9	12.9	11.6	10.3
100°	16.7	18.0	18.0	32.2	68.2	91.4	65.7	33.5	24.5	18.0	18.0
102.5°	54.1	56.7	69.5	104.3	154.5	140.4	118.5	112.0	77.3	61.8	59.2
105°	137.8	136.5	146.8	173.8	216.3	212.5	195.7	177.7	153.2	141.6	141.6
107.5°	181.6	181.6	190.6	213.8	245.9	287.1	291.0	230.5	202.2	189.3	188.0
110°	204.7	204.7	212.5	231.8	274.3	332.2	329.6	284.6	249.8	233.1	230.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	209.9	211.2	221.5	251.1	297.5	323.2	311.6	293.6	278.1	265.3	262.7
115°	217.6	217.6	229.2	257.5	283.3	293.6	280.7	266.5	256.2	251.1	253.7
117.5°	215.0	218.9	221.5	236.9	253.7	261.4	255.0	235.6	227.9	225.3	221.5
120°	199.6	199.6	202.2	209.9	218.9	222.8	220.2	207.3	200.9	199.6	197.0
122.5°	177.7	179.0	177.7	181.6	188.0	191.9	189.3	179.0	176.4	176.4	173.8
125°	155.8	155.8	154.5	157.1	161.0	159.7	161.0	155.8	154.5	154.5	153.2
127.5°	140.4	139.1	136.5	137.8	139.1	139.1	140.4	135.2	136.5	137.8	136.5
130°	124.9	124.9	122.3	122.3	122.3	119.8	122.3	119.8	121.0	122.3	123.6
132.5°	110.7	110.7	106.9	105.6	105.6	105.6	106.9	105.6	108.2	110.7	110.7
135°	99.2	99.2	95.3	96.6	96.6	95.3	96.6	95.3	97.9	99.2	99.2
137.5°	90.1	90.1	87.6	87.6	87.6	86.3	87.6	87.6	88.8	91.4	92.7
140°	82.4	82.4	81.1	81.1	79.8	81.1	81.1	81.1	82.4	83.7	83.7
142.5°	78.5	77.3	76.0	74.7	76.0	76.0	76.0	74.7	76.0	78.5	78.5
145°	72.1	72.1	70.8	70.8	70.8	72.1	70.8	70.8	72.1	72.1	73.4
147.5°	68.2	68.2	67.0	68.2	68.2	68.2	68.2	67.0	68.2	68.2	69.5
150°	67.0	65.7	64.4	65.7	65.7	64.4	64.4	64.4	64.4	65.7	65.7
152.5°	63.1	63.1	61.8	63.1	61.8	61.8	61.8	61.8	61.8	63.1	64.4
155°	60.5	60.5	59.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
157.5°	57.9	59.2	57.9	57.9	57.9	57.9	57.9	57.9	57.9	59.2	59.2
160°	56.7	56.7	56.7	56.7	55.4	55.4	55.4	56.7	56.7	56.7	57.9
162.5°	55.4	55.4	55.4	55.4	54.1	54.1	54.1	54.1	55.4	55.4	56.7
165°	55.4	54.1	54.1	54.1	52.8	52.8	52.8	52.8	54.1	55.4	54.1
167.5°	52.8	52.8	52.8	52.8	52.8	51.5	51.5	52.8	52.8	52.8	54.1
170°	52.8	52.8	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	52.8
172.5°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	51.5	51.5	52.8	52.8
175°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	52.8	52.8	52.8	51.5
177.5°	52.8	52.8	52.8	52.8	51.5	52.8	52.8	52.8	52.8	52.8	52.8
180°	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8

(END OF REPORT)