

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: P833550

Luminaire Tested: **TTN-D2-735-U-WQ-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833550  
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-D2-735-U-WQ-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

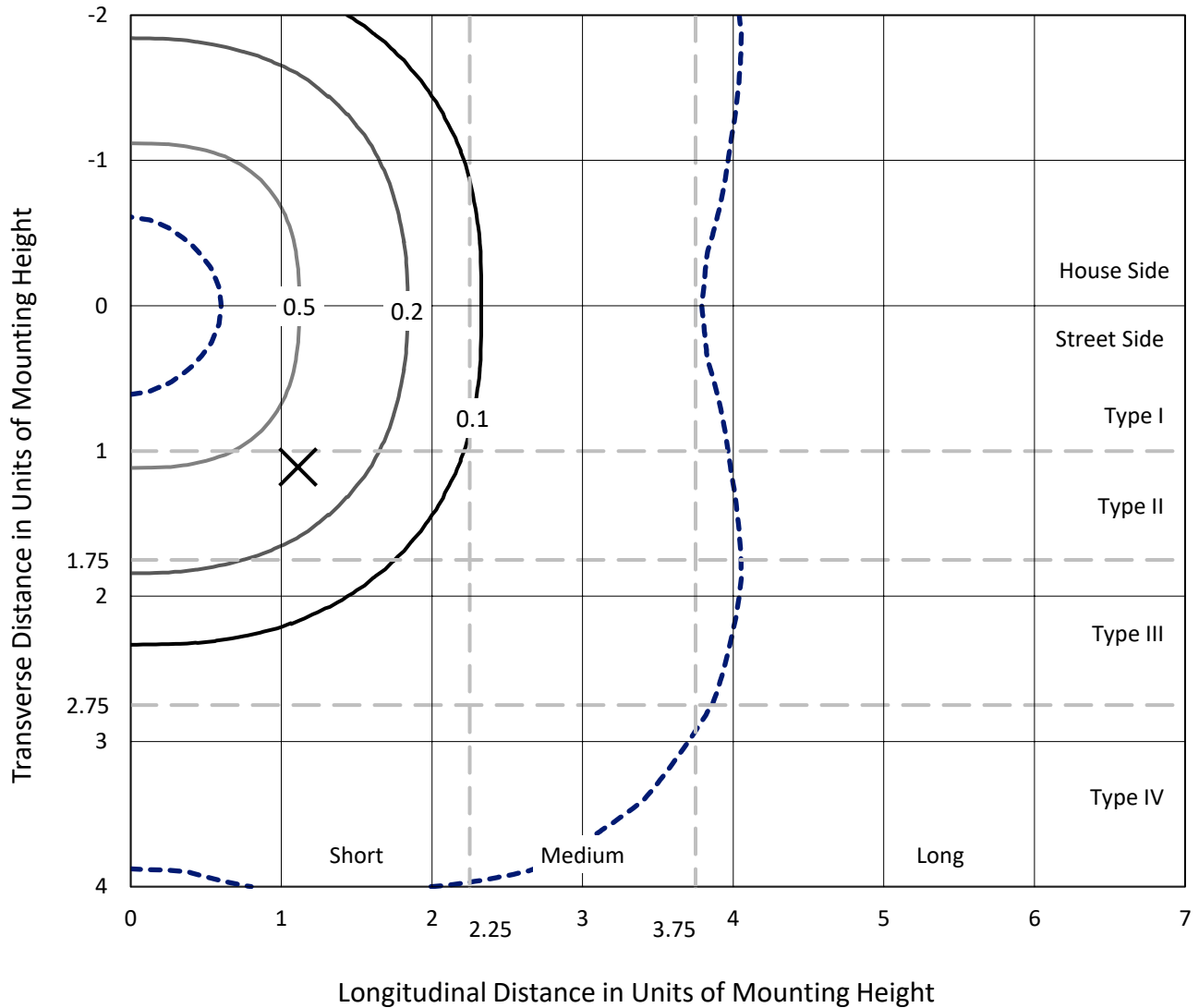
Lumens per Lamp: N/A  
Luminaire Lumens: 5764.7 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G2  
  
Input Watts (W): 49.5  
Input Voltage (V): NR  
Input Current (Ain): 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

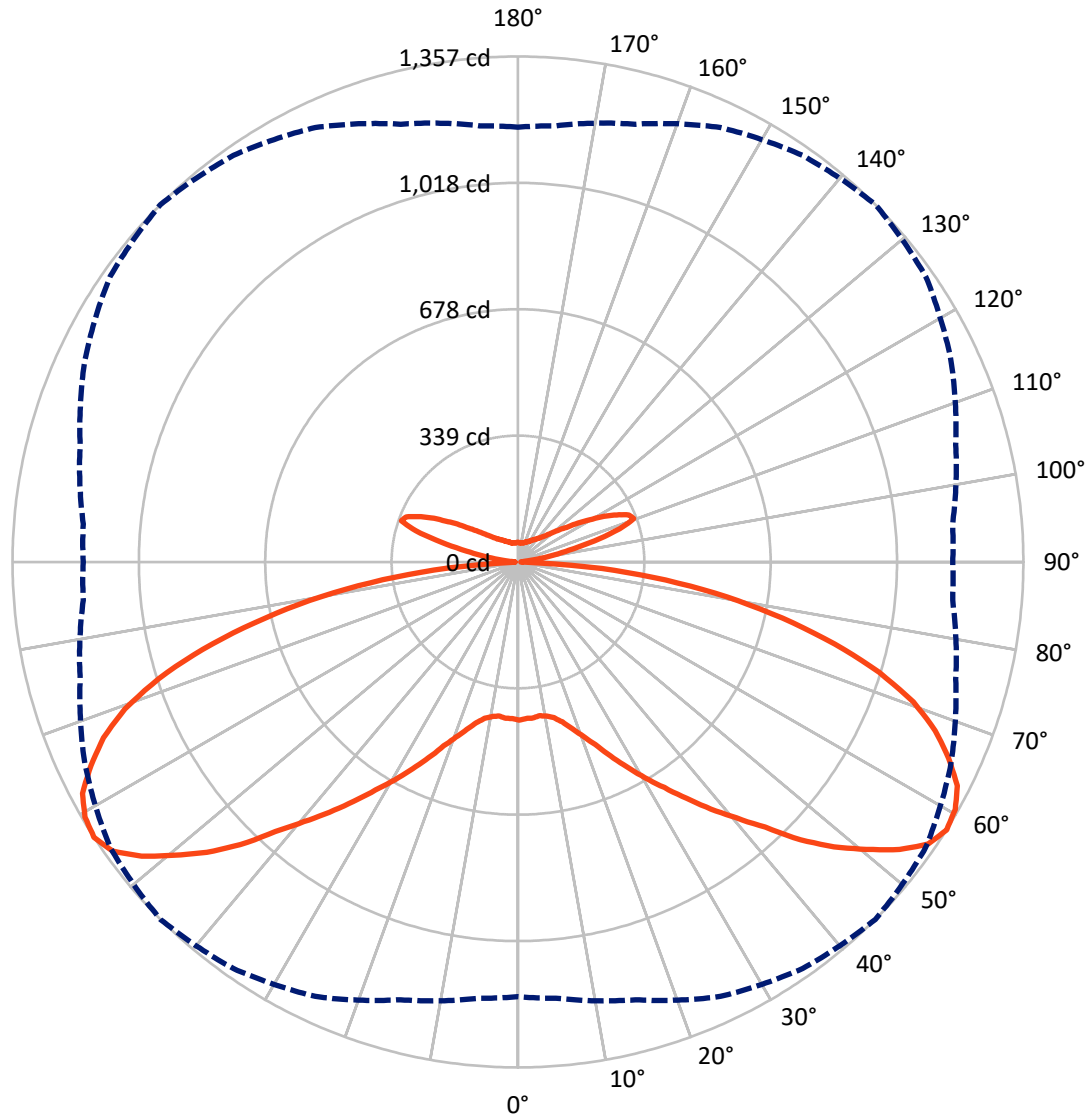
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 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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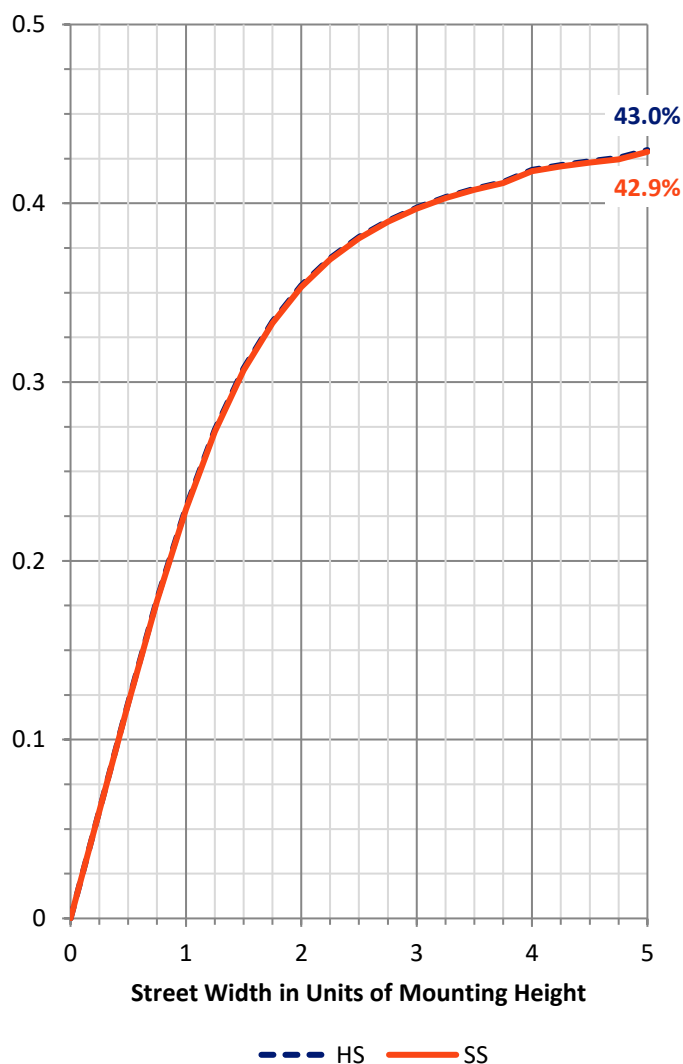
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2506.0	376.3	2882.3
	% Fixture	43.5	6.5	50.0
<b>Street Side</b>	Lumens	2506.0	376.3	2882.3
	% Fixture	43.5	6.5	50.0
<b>Total</b>	Lumens	5012.0	752.7	5764.7
	% Fixture	86.9	13.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.9	0.7
10°-20°	127.4	2.2
20°-30°	267.3	4.6
30°-40°	485.0	8.4
40°-50°	790.6	13.7
50°-60°	1106.6	19.2
60°-70°	1155.2	20.0
70°-80°	825.4	14.3
80°-90°	214.6	3.7
90°-100°	16.8	0.3
100°-110°	170.7	3.0
110°-120°	249.6	4.3
120°-130°	144.9	2.5
130°-140°	76.7	1.3
140°-150°	45.6	0.8
150°-160°	28.1	0.5
160°-170°	15.3	0.3
170°-180°	5.0	0.1
0°-90°	5012.0	86.9
0°-180°	5764.7	100.0

**Coefficient of Utilization**

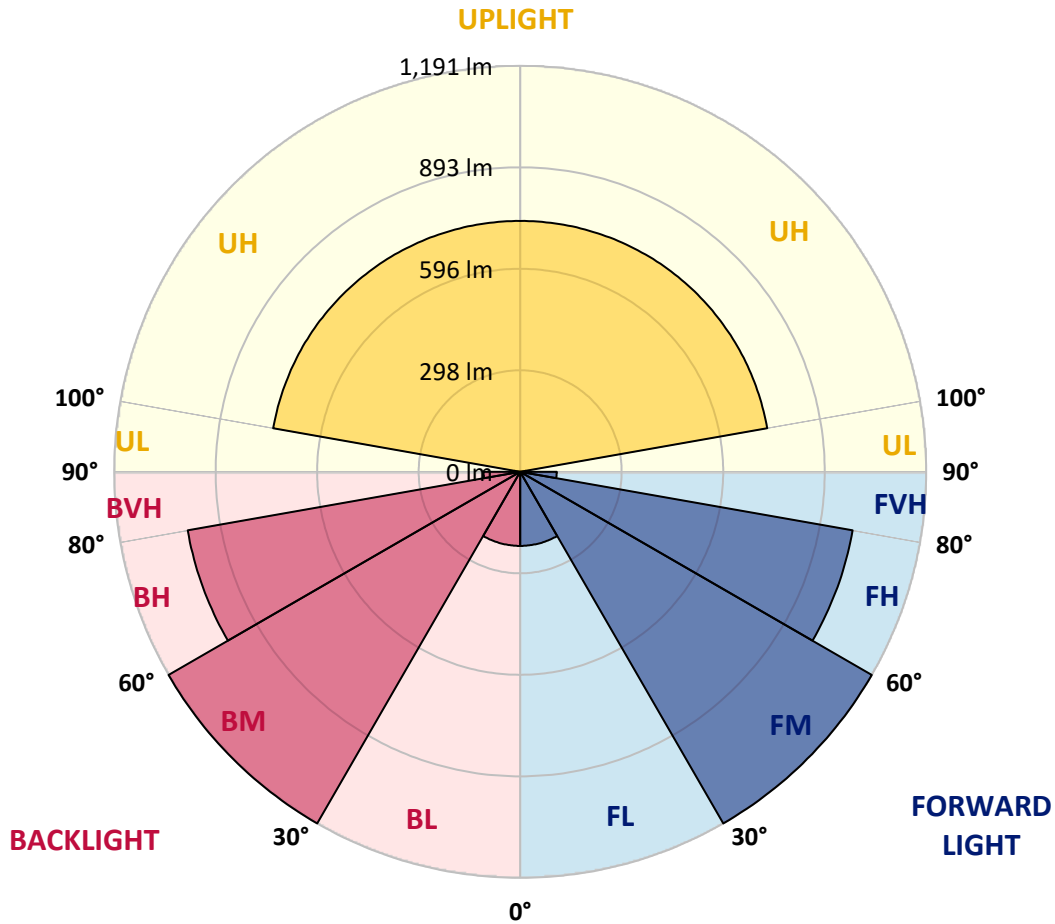


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	217.3	3.8			
FM (30°-60°)	1191.1	20.7			
FH (60°-80°)	990.3	17.2			G1/1800
FVH (80°-90°)	107.3	1.9			G2/225
BL (0°-30°)	217.3	3.8	B1/500		
BM (30°-60°)	1191.1	20.7	B2/2500		
BH (60°-80°)	990.3	17.2	B2/1000		G1/1800
BVH (80°-90°)	107.3	1.9			G2/225
UL (90°-100°)	16.8	0.3		U2/50	
UH (100°-180°)	735.8	12.8		U4/1000	

**BUG Rating: B2-U4-G2**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8	424.8
2.5°	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6
5°	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6	420.6
7.5°	412.4	412.4	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5	416.5
10°	412.4	412.4	416.5	416.5	420.6	420.6	420.6	416.5	416.5	412.4	412.4
12.5°	420.6	420.6	420.6	424.8	428.9	428.9	428.9	424.8	424.8	420.6	420.6
15°	433.0	437.1	437.1	441.2	445.4	445.4	445.4	441.2	441.2	437.1	437.1
17.5°	457.7	457.7	457.7	461.9	466.0	470.1	470.1	461.9	461.9	457.7	461.9
20°	482.5	486.6	486.6	490.7	494.9	499.0	494.9	490.7	486.6	486.6	486.6
22.5°	519.6	519.6	523.7	523.7	532.0	532.0	532.0	523.7	523.7	523.7	523.7
25°	560.8	560.8	565.0	569.1	577.3	577.3	573.2	565.0	565.0	565.0	569.1
27.5°	610.3	610.3	614.4	614.4	622.7	622.7	618.6	614.4	614.4	614.4	618.6
30°	655.7	655.7	663.9	668.1	672.2	672.2	672.2	663.9	663.9	659.8	659.8
32.5°	696.9	701.0	705.2	717.5	725.8	721.7	725.8	717.5	709.3	705.2	705.2
35°	742.3	746.4	754.7	767.0	779.4	779.4	779.4	767.0	758.8	750.5	754.7
37.5°	795.9	795.9	808.3	820.6	837.1	841.3	837.1	824.8	812.4	804.1	804.1
40°	853.6	853.6	866.0	878.4	899.0	903.1	899.0	882.5	866.0	861.9	861.9
42.5°	911.4	911.4	927.9	940.2	965.0	973.2	965.0	944.3	927.9	915.5	919.6
45°	973.2	977.3	998.0	1022.7	1051.6	1063.9	1051.6	1026.8	1002.1	977.3	977.3
47.5°	1043.3	1043.3	1068.1	1096.9	1129.9	1142.3	1125.8	1101.1	1068.1	1047.4	1047.4
50°	1088.7	1092.8	1125.8	1162.9	1204.1	1212.4	1200.0	1162.9	1125.8	1096.9	1092.8
52.5°	1134.0	1138.2	1175.3	1228.9	1270.1	1282.5	1266.0	1228.9	1175.3	1138.2	1138.2
55°	1162.9	1171.2	1212.4	1270.1	1315.5	1336.1	1311.4	1270.1	1208.3	1167.0	1162.9
57.5°	1167.0	1175.3	1216.5	1286.6	1332.0	1356.7	1336.1	1282.5	1216.5	1171.2	1167.0
60°	1158.8	1162.9	1204.1	1278.4	1332.0	1348.5	1332.0	1274.3	1200.0	1162.9	1154.7
62.5°	1138.2	1146.4	1187.7	1249.5	1311.4	1323.7	1307.2	1245.4	1183.5	1138.2	1129.9
65°	1072.2	1080.4	1142.3	1204.1	1257.8	1270.1	1257.8	1204.1	1138.2	1072.2	1063.9
67.5°	998.0	1002.1	1063.9	1138.2	1187.7	1208.3	1187.7	1142.3	1059.8	998.0	989.7
70°	919.6	923.7	973.2	1051.6	1101.1	1125.8	1105.2	1055.7	969.1	915.5	911.4
72.5°	828.9	828.9	878.4	940.2	989.7	1014.5	998.0	936.1	870.1	816.5	808.3
75°	705.2	709.3	762.9	808.3	861.9	878.4	861.9	812.4	750.5	696.9	688.7
77.5°	577.3	581.5	626.8	663.9	713.4	725.8	713.4	672.2	614.4	569.1	565.0
80°	437.1	441.2	478.4	511.4	552.6	569.1	556.7	515.5	470.1	428.9	416.5
82.5°	284.5	288.7	325.8	350.5	387.6	400.0	391.8	354.6	317.5	276.3	272.2
85°	127.8	132.0	165.0	185.6	214.4	226.8	218.6	185.6	156.7	119.6	111.3
87.5°	12.4	12.4	12.4	12.4	12.4	16.5	16.5	12.4	12.4	12.4	12.4
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)