

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: P833538

Luminaire Tested: **TTN-D2-735-U-RW-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833538
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-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: 5335.7 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

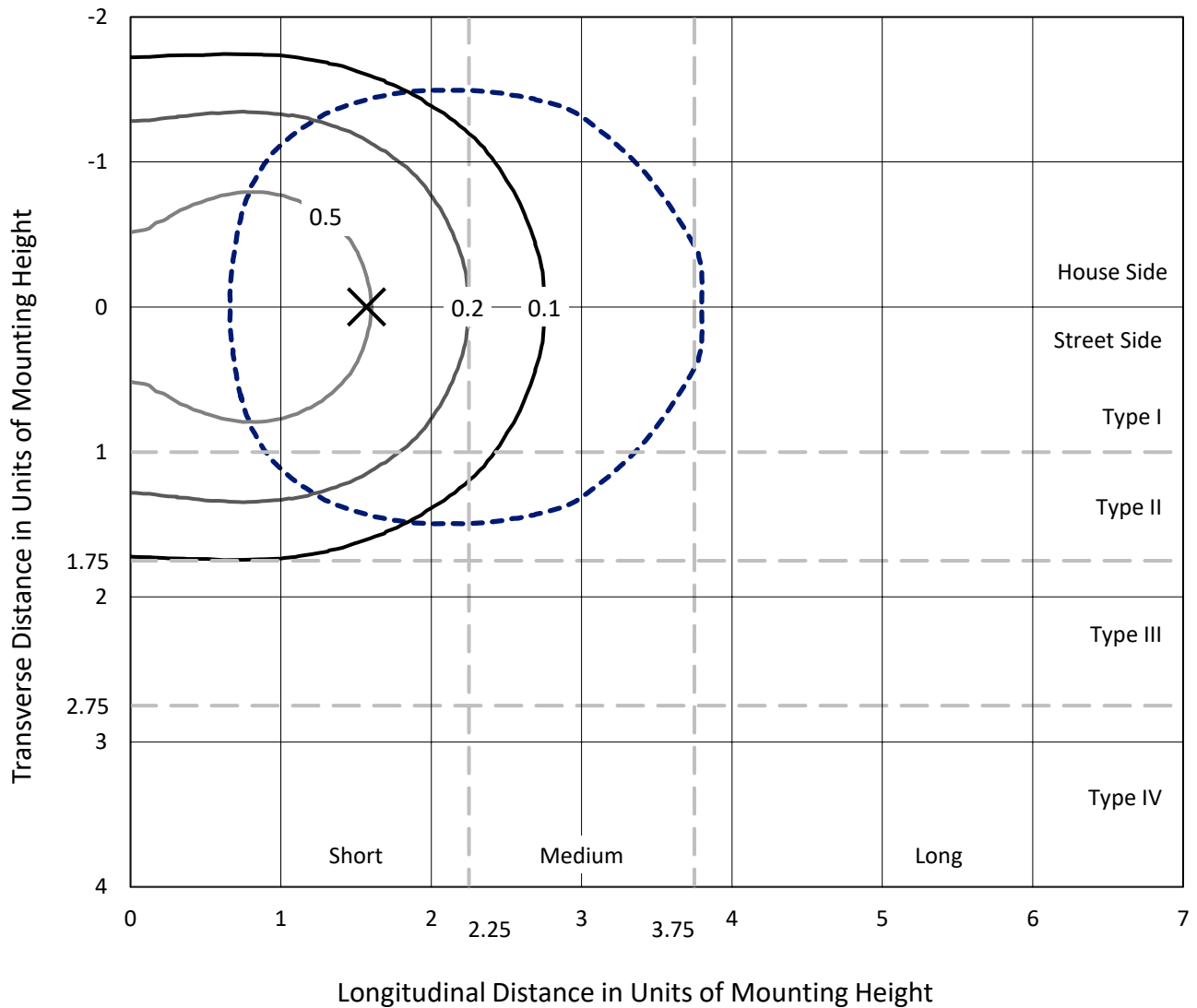
Input Watts (W): 49.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

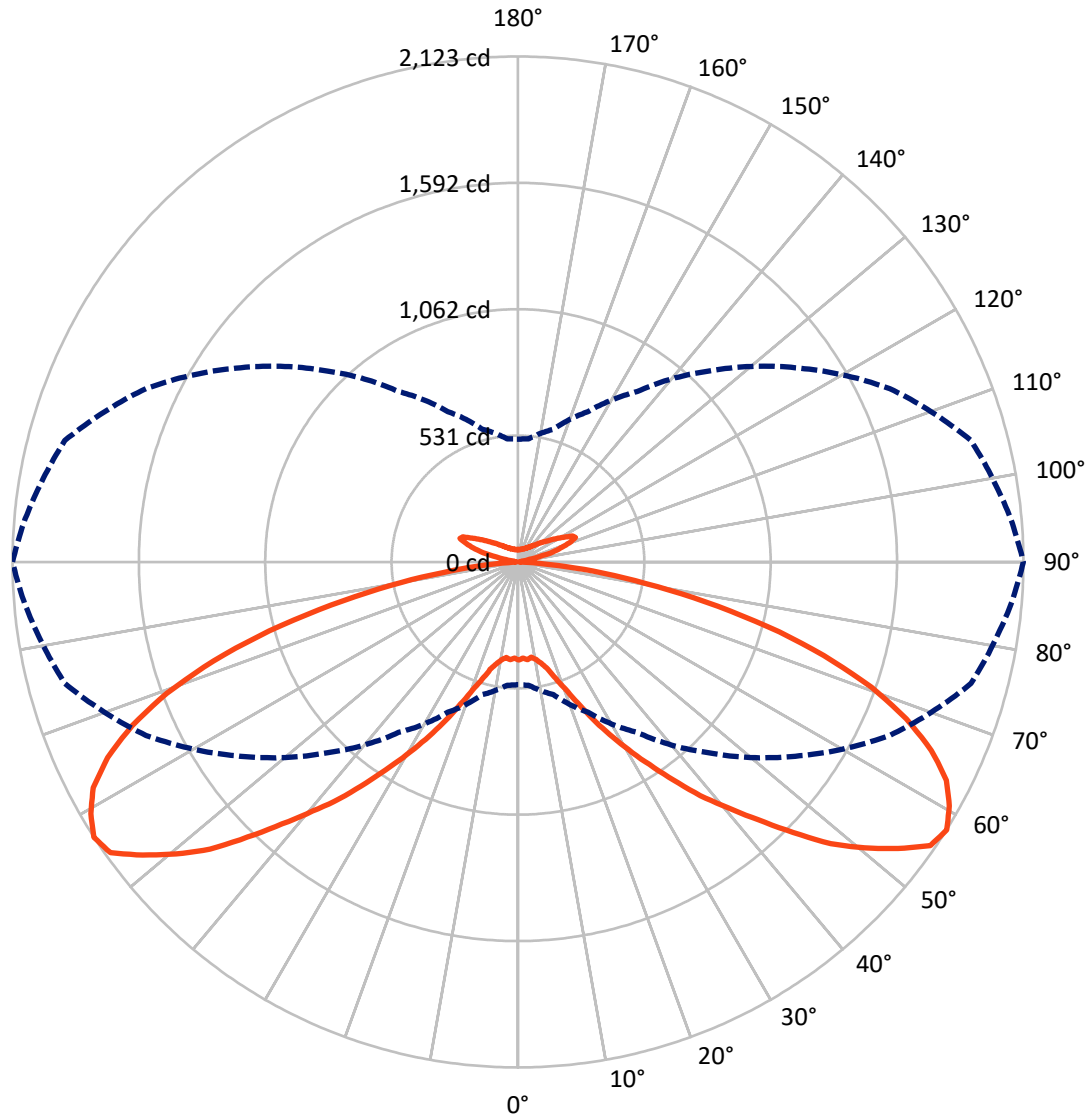
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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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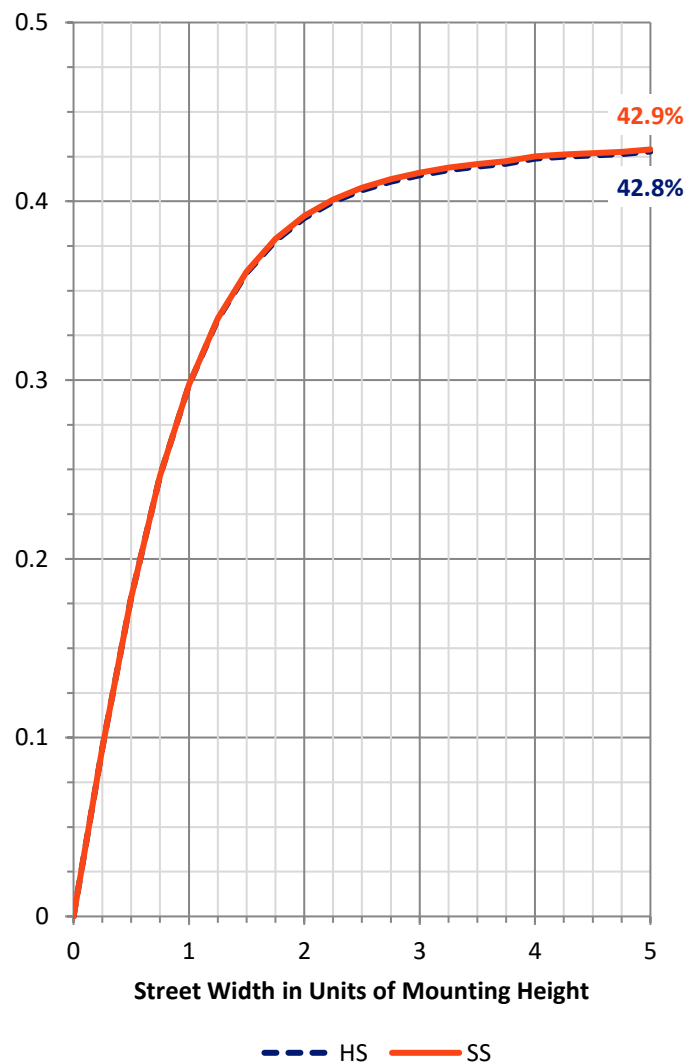
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2291.5	376.3	2667.8
	% Fixture	42.9	7.1	50.0
Street Side	Lumens	2291.5	376.3	2667.8
	% Fixture	42.9	7.1	50.0
Total	Lumens	4583.0	752.7	5335.7
	% Fixture	85.9	14.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	0.7
10°-20°	126.6	2.4
20°-30°	269.5	5.1
30°-40°	496.6	9.3
40°-50°	799.6	15.0
50°-60°	1082.3	20.3
60°-70°	1052.3	19.7
70°-80°	612.3	11.5
80°-90°	104.5	2.0
90°-100°	16.8	0.3
100°-110°	170.7	3.2
110°-120°	249.6	4.7
120°-130°	144.9	2.7
130°-140°	76.7	1.4
140°-150°	45.6	0.9
150°-160°	28.1	0.5
160°-170°	15.3	0.3
170°-180°	5.0	0.1
0°-90°	4583.0	85.9
0°-180°	5335.7	100.0



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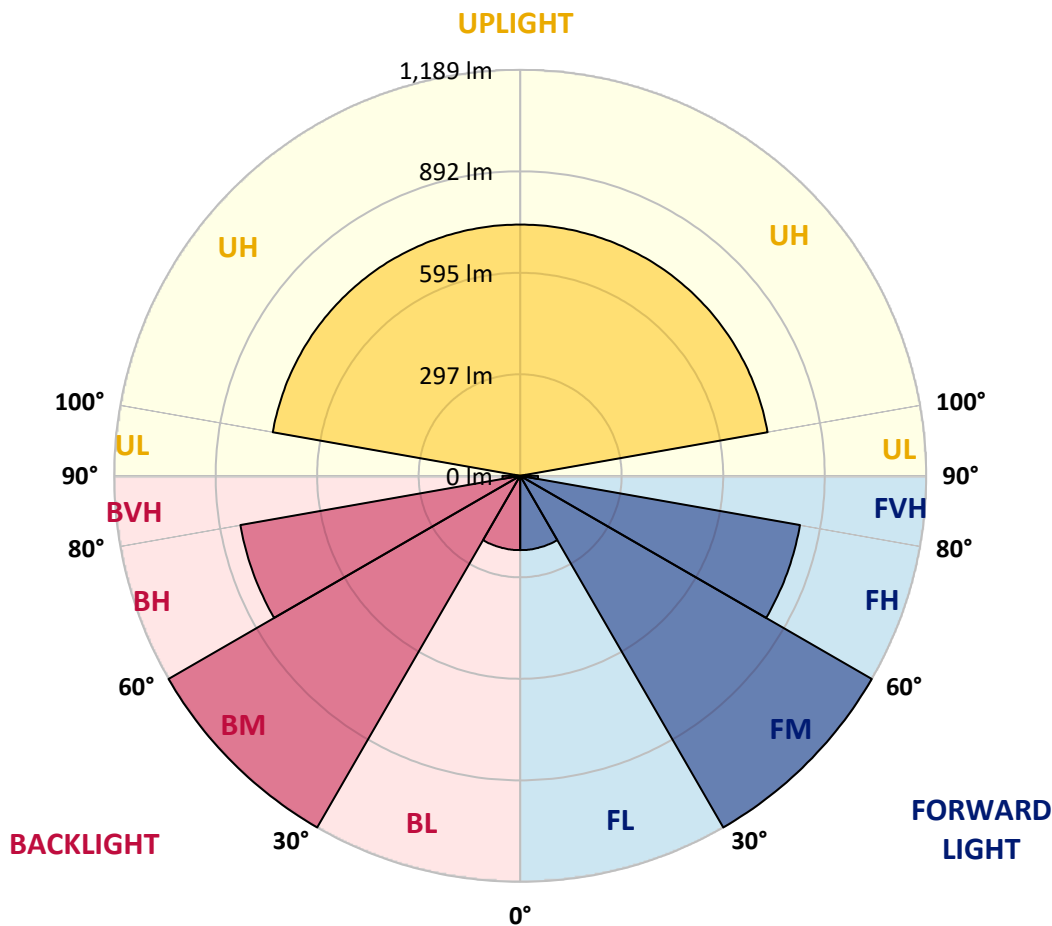
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	217.7	4.1			
FM (30°-60°)	1189.3	22.3			
FH (60°-80°)	832.3	15.6			G1/1800
FVH (80°-90°)	52.3	1.0			G1/100
BL (0°-30°)	217.7	4.1	B1/500		
BM (30°-60°)	1189.3	22.3	B2/2500		
BH (60°-80°)	832.3	15.6	B2/1000		G2/1000
BVH (80°-90°)	52.3	1.0			G1/100
UL (90°-100°)	16.8	0.3		U2/50	
UH (100°-180°)	735.8	13.8		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°	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3
2.5°	412.3	412.3	412.3	412.3	408.1	408.1	408.1	404.0	404.0	404.0	404.0
5°	412.3	412.3	412.3	416.4	416.4	416.4	412.3	412.3	412.3	412.3	412.3
7.5°	412.3	416.4	416.4	412.3	412.3	408.1	408.1	408.1	404.0	404.0	404.0
10°	412.3	412.3	412.3	412.3	408.1	408.1	412.3	412.3	416.4	416.4	416.4
12.5°	408.1	408.1	412.3	412.3	412.3	416.4	424.6	428.8	432.9	437.0	437.0
15°	412.3	412.3	416.4	420.5	424.6	432.9	445.2	457.6	465.9	470.0	465.9
17.5°	412.3	416.4	420.5	428.8	441.1	453.5	474.1	490.6	507.1	511.2	515.3
20°	420.5	420.5	424.6	441.1	461.7	482.3	511.2	540.1	560.7	568.9	568.9
22.5°	424.6	428.8	432.9	453.5	486.5	519.5	560.7	593.7	622.5	639.0	643.1
25°	437.0	437.0	445.2	474.1	515.3	564.8	618.4	667.9	705.0	725.6	729.7
27.5°	445.2	449.4	461.7	498.8	552.4	614.3	688.5	746.2	791.5	816.3	820.4
30°	453.5	457.6	482.3	523.6	589.5	663.7	750.3	824.5	882.2	911.1	915.2
32.5°	465.9	470.0	498.8	544.2	622.5	713.2	812.2	902.9	985.3	1010.0	1014.2
35°	478.2	482.3	515.3	568.9	659.6	762.7	878.1	985.3	1084.3	1117.2	1125.5
37.5°	490.6	494.7	527.7	593.7	696.7	816.3	952.3	1080.1	1187.3	1232.7	1245.0
40°	503.0	507.1	544.2	618.4	733.8	874.0	1030.7	1170.8	1294.5	1348.1	1356.3
42.5°	511.2	515.3	556.6	639.0	770.9	927.6	1113.1	1269.8	1401.7	1471.8	1480.0
45°	523.6	527.7	573.0	667.9	803.9	989.4	1191.4	1381.1	1533.6	1611.9	1620.2
47.5°	531.8	535.9	585.4	684.4	841.0	1047.1	1273.9	1480.0	1661.4	1743.9	1768.6
50°	535.9	540.1	593.7	700.8	865.8	1088.4	1339.9	1579.0	1772.7	1875.8	1888.2
52.5°	535.9	544.2	597.8	713.2	882.2	1125.5	1393.4	1661.4	1879.9	1995.4	1999.5
55°	531.8	535.9	593.7	709.1	890.5	1142.0	1430.6	1710.9	1954.1	2065.4	2102.5
57.5°	515.3	519.5	577.2	696.7	874.0	1133.7	1422.3	1723.3	1970.6	2077.8	2123.2
60°	490.6	498.8	552.4	667.9	849.3	1104.9	1397.6	1698.5	1945.9	2077.8	2081.9
62.5°	461.7	465.9	519.5	630.8	812.2	1059.5	1352.2	1649.0	1888.2	2024.2	2020.1
65°	420.5	424.6	470.0	585.4	746.2	972.9	1261.5	1570.7	1776.9	1921.1	1908.8
67.5°	375.2	379.3	420.5	523.6	667.9	878.1	1137.8	1438.8	1620.2	1768.6	1760.4
70°	325.7	325.7	362.8	449.4	585.4	770.9	1001.8	1265.6	1447.0	1570.7	1574.8
72.5°	268.0	268.0	301.0	375.2	490.6	647.3	845.1	1080.1	1228.5	1335.7	1344.0
75°	210.3	206.1	235.0	296.8	387.5	515.3	667.9	869.9	985.3	1088.4	1084.3
77.5°	148.4	148.4	164.9	214.4	280.3	383.4	494.7	655.5	733.8	820.4	803.9
80°	94.8	94.8	103.1	140.2	185.5	255.6	325.7	445.2	498.8	564.8	544.2
82.5°	49.5	45.3	53.6	74.2	98.9	140.2	181.4	259.7	284.5	333.9	317.4
85°	16.5	16.5	16.5	24.7	37.1	53.6	70.1	111.3	115.4	148.4	136.0
87.5°	4.1	0.0	0.0	4.1	4.1	4.1	4.1	12.4	12.4	24.7	16.5
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)