

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: P833331

Luminaire Tested: **TTN-D1-830-U-RW-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833331
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-D1-830-U-RW-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3678.7 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

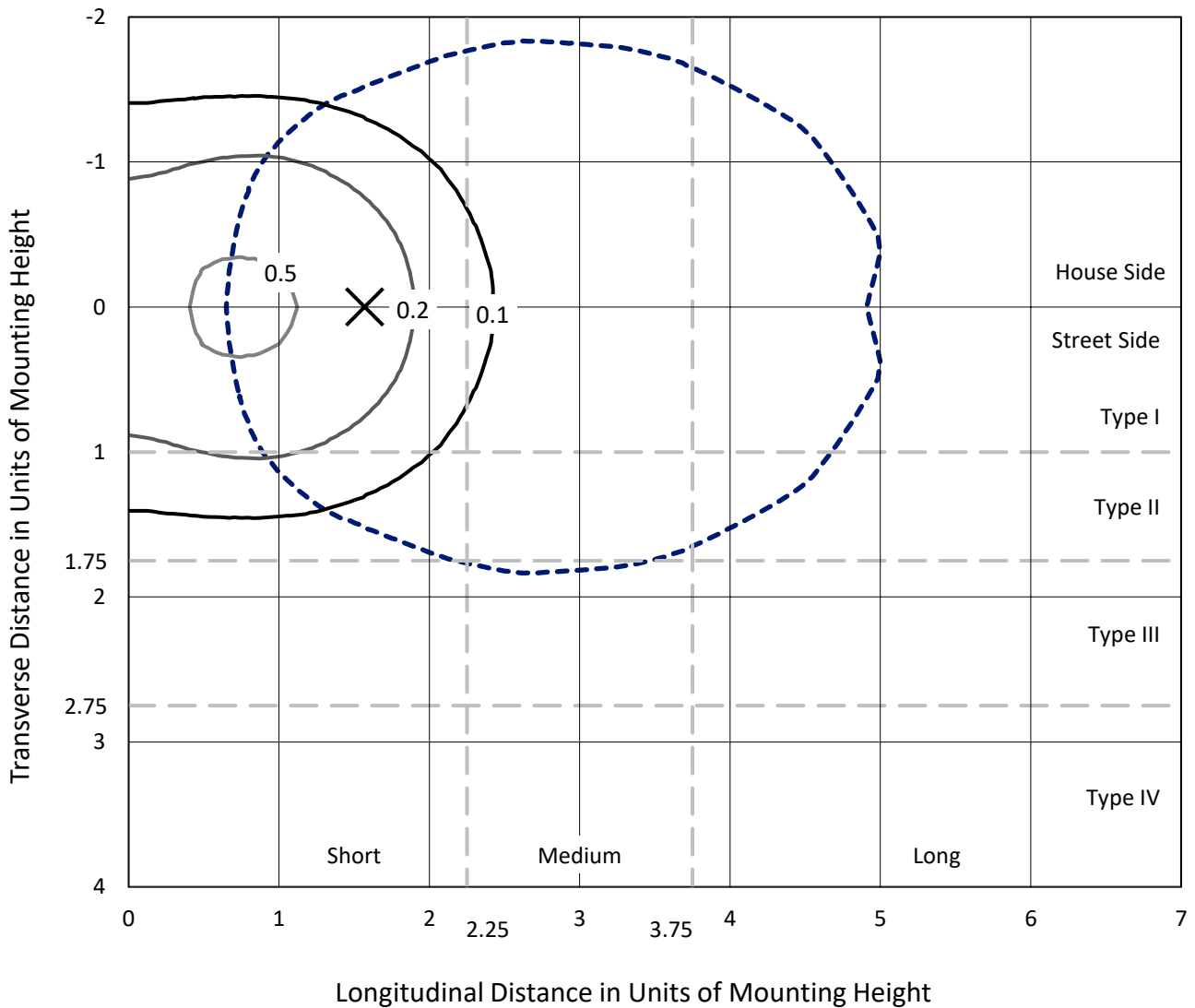
Input Watts (W): 33.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

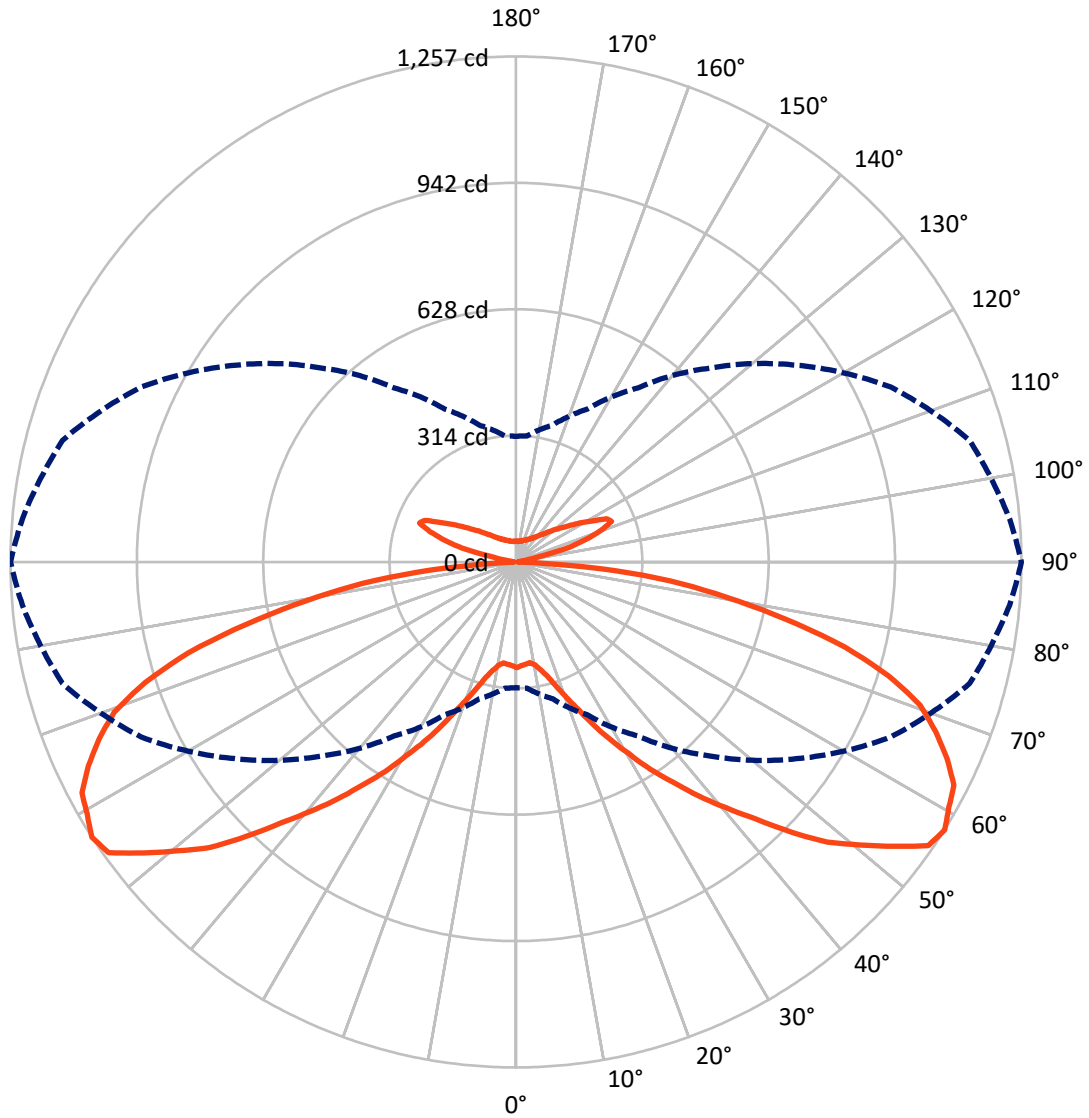
× Max cd
 - - - 1/2 Max cd



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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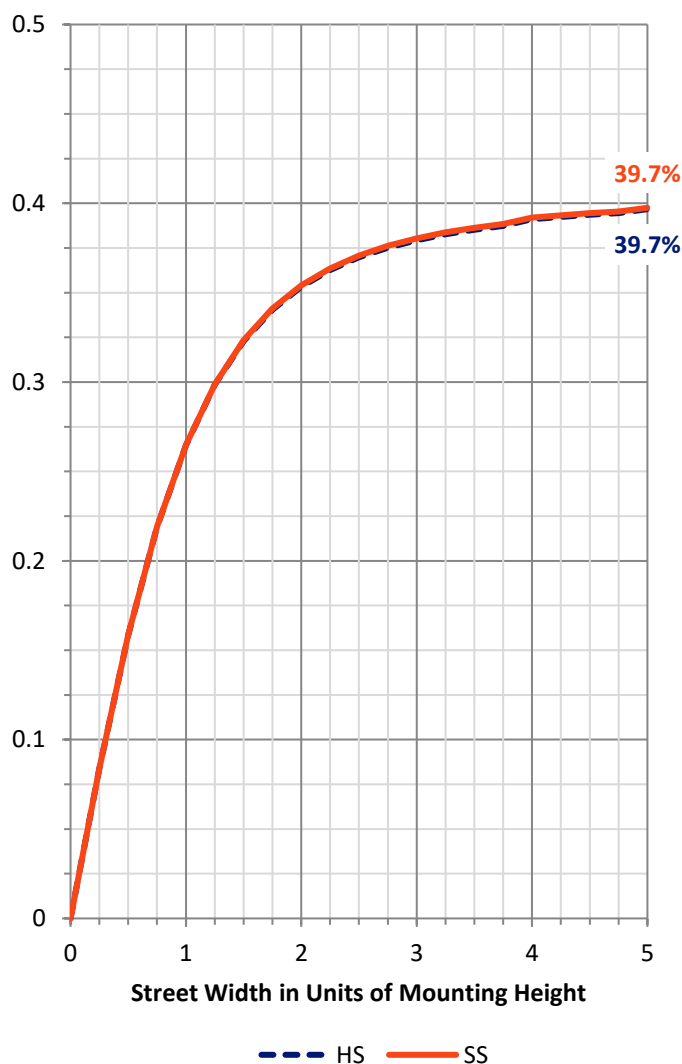
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1469.0	370.3	1839.3
	% Fixture	39.9	10.1	50.0
Street Side	Lumens	1469.0	370.3	1839.3
	% Fixture	39.9	10.1	50.0
Total	Lumens	2938.0	740.7	3678.7
	% Fixture	79.9	20.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	0.7
10°-20°	78.8	2.1
20°-30°	164.3	4.5
30°-40°	294.7	8.0
40°-50°	470.9	12.8
50°-60°	644.7	17.5
60°-70°	665.0	18.1
70°-80°	472.9	12.9
80°-90°	122.0	3.3
90°-100°	16.5	0.4
100°-110°	168.0	4.6
110°-120°	245.6	6.7
120°-130°	142.5	3.9
130°-140°	75.5	2.1
140°-150°	44.9	1.2
150°-160°	27.6	0.8
160°-170°	15.1	0.4
170°-180°	4.9	0.1
0°-90°	2938.0	79.9
0°-180°	3678.7	100.0

Coefficient of Utilization



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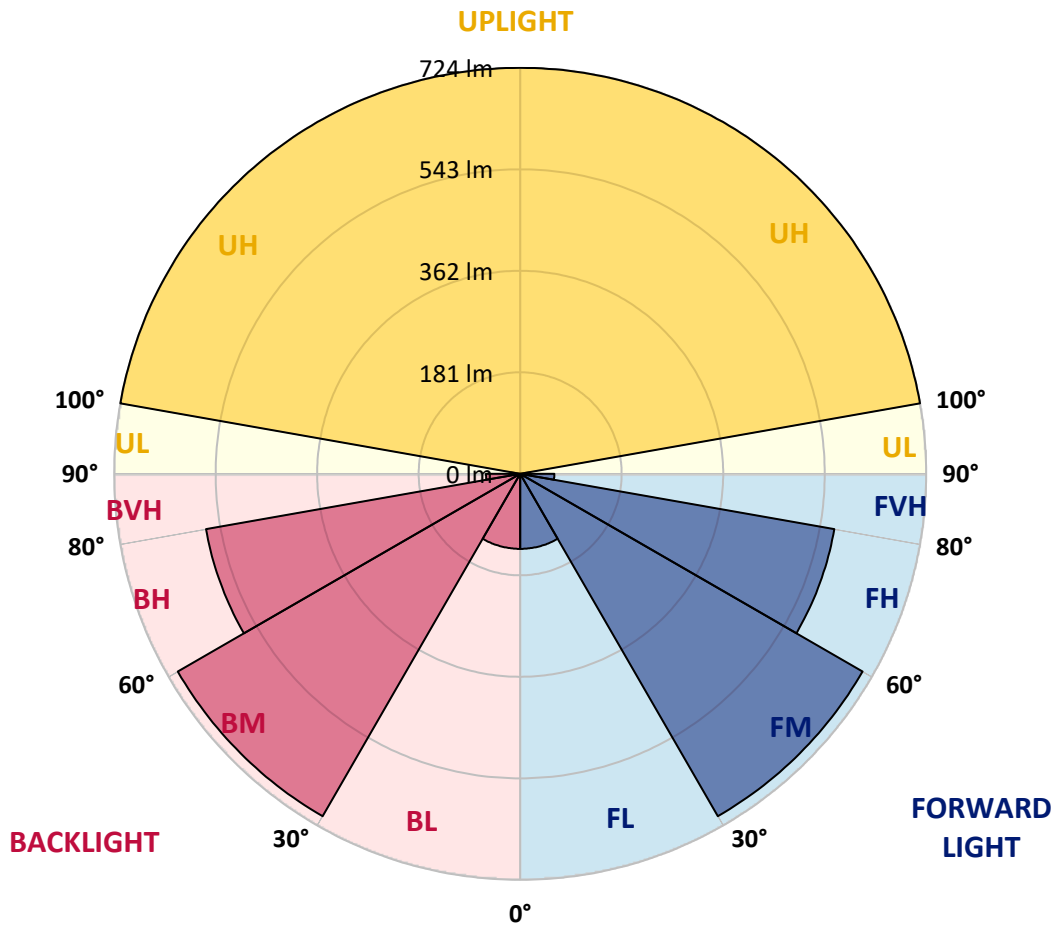
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	133.9	3.6			
FM (30°-60°)	705.2	19.2			
FH (60°-80°)	569.0	15.5			G0/660
FVH (80°-90°)	61.0	1.7			G1/100
BL (0°-30°)	133.9	3.6	B1/500		
BM (30°-60°)	705.2	19.2	B1/1000		
BH (60°-80°)	569.0	15.5	B2/1000		G2/1000
BVH (80°-90°)	61.0	1.7			G1/100
UL (90°-100°)	16.5	0.4		U2/50	
UH (100°-180°)	724.2	19.7		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°	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7
2.5°	262.7	262.7	260.2	260.2	260.2	257.8	257.8	257.8	257.8	255.3	257.8
5°	262.7	262.7	262.7	262.7	260.2	257.8	257.8	257.8	255.3	255.3	255.3
7.5°	260.2	260.2	260.2	260.2	257.8	255.3	255.3	255.3	252.8	252.8	252.8
10°	257.8	260.2	257.8	257.8	255.3	255.3	257.8	257.8	260.2	260.2	260.2
12.5°	255.3	255.3	255.3	257.8	257.8	260.2	265.2	270.2	272.6	275.1	275.1
15°	255.3	255.3	257.8	260.2	265.2	270.2	277.6	285.0	290.0	294.9	294.9
17.5°	255.3	255.3	257.8	265.2	272.6	282.6	294.9	304.9	314.8	322.2	324.7
20°	255.3	255.3	260.2	270.2	285.0	299.9	317.3	332.1	347.0	359.4	359.4
22.5°	257.8	260.2	265.2	277.6	299.9	322.2	344.5	366.8	384.2	399.0	399.0
25°	262.7	262.7	270.2	290.0	317.3	347.0	379.2	406.5	428.8	448.6	448.6
27.5°	265.2	267.7	277.6	302.4	337.1	374.3	418.9	451.1	480.8	498.2	500.7
30°	270.2	272.6	287.5	312.3	354.4	401.5	453.6	498.2	530.4	547.8	552.7
32.5°	272.6	275.1	294.9	324.7	371.8	426.3	485.8	542.8	587.4	607.2	614.7
35°	280.1	282.6	302.4	337.1	391.6	453.6	523.0	589.9	641.9	666.7	671.7
37.5°	287.5	290.0	309.8	349.5	411.4	483.3	562.6	639.5	699.0	728.7	738.6
40°	292.5	294.9	317.3	364.3	433.7	515.5	607.2	691.5	758.4	795.6	803.0
42.5°	299.9	302.4	327.2	376.7	453.6	547.8	654.3	748.5	820.4	862.5	872.4
45°	307.3	309.8	337.1	391.6	475.9	582.5	701.4	815.4	897.2	946.8	956.7
47.5°	314.8	317.3	347.0	406.5	498.2	617.2	751.0	874.9	974.1	1021.2	1041.0
50°	317.3	322.2	352.0	416.4	513.1	646.9	793.1	934.4	1038.5	1100.5	1105.4
52.5°	319.7	324.7	356.9	423.8	525.5	669.2	827.8	984.0	1105.4	1179.8	1174.8
55°	322.2	322.2	356.9	423.8	530.4	684.1	852.6	1016.2	1150.0	1209.5	1244.2
57.5°	312.3	314.8	352.0	418.9	527.9	681.6	852.6	1028.6	1167.4	1231.8	1256.6
60°	299.9	304.9	339.6	406.5	518.0	674.2	847.7	1023.6	1174.8	1244.2	1236.8
62.5°	282.6	292.5	322.2	389.1	503.1	656.8	840.2	1011.2	1157.5	1229.4	1221.9
65°	262.7	272.6	299.9	371.8	470.9	614.7	800.6	986.5	1110.4	1192.2	1177.3
67.5°	242.9	250.3	277.6	342.0	433.7	570.1	748.5	931.9	1043.5	1132.7	1125.3
70°	220.6	223.1	250.3	307.3	396.6	525.5	699.0	855.1	984.0	1050.9	1065.8
72.5°	193.3	193.3	220.6	270.2	352.0	466.0	632.0	768.4	889.8	946.8	969.1
75°	158.6	161.1	183.4	228.0	294.9	399.0	537.8	676.6	778.3	837.7	845.2
77.5°	123.9	126.4	143.8	180.9	237.9	322.2	443.7	552.7	649.4	701.4	686.6
80°	89.2	91.7	104.1	131.4	176.0	240.4	342.0	438.7	508.1	550.2	530.4
82.5°	54.5	57.0	64.4	81.8	111.5	156.1	233.0	304.9	359.4	394.1	386.7
85°	27.3	27.3	32.2	37.2	47.1	69.4	111.5	153.7	195.8	220.6	213.2
87.5°	5.0	7.4	7.4	7.4	7.4	5.0	7.4	7.4	7.4	12.4	5.0
90°	6.3	6.3	7.6	7.6	7.6	7.6	7.6	7.6	7.6	6.3	6.3
92.5°	6.3	6.3	6.3	8.9	10.1	8.9	10.1	7.6	7.6	6.3	6.3
95°	7.6	7.6	8.9	11.4	13.9	15.2	15.2	8.9	8.9	7.6	7.6
97.5°	10.1	11.4	11.4	13.9	22.8	41.8	25.3	12.7	12.7	11.4	10.1
100°	16.5	17.7	17.7	31.7	67.2	90.0	64.6	32.9	24.1	17.7	17.7
102.5°	53.2	55.8	68.4	102.6	152.1	138.1	116.6	110.2	76.0	60.8	58.3
105°	135.6	134.3	144.5	171.1	212.9	209.1	192.6	174.9	150.8	139.4	139.4
107.5°	178.7	178.7	187.5	210.4	242.0	282.6	286.4	226.8	198.9	186.3	185.0
110°	201.5	201.5	209.1	228.1	269.9	326.9	324.4	280.0	245.8	229.4	226.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	206.5	207.8	218.0	247.1	292.7	318.1	306.7	288.9	273.7	261.0	258.5
115°	214.2	214.2	225.6	253.4	278.8	288.9	276.2	262.3	252.2	247.1	249.6
117.5°	211.6	215.4	218.0	233.2	249.6	257.2	250.9	231.9	224.3	221.8	218.0
120°	196.4	196.4	198.9	206.5	215.4	219.2	216.7	204.0	197.7	196.4	193.9
122.5°	174.9	176.1	174.9	178.7	185.0	188.8	186.3	176.1	173.6	173.6	171.1
125°	153.3	153.3	152.1	154.6	158.4	157.1	158.4	153.3	152.1	152.1	150.8
127.5°	138.1	136.9	134.3	135.6	136.9	136.9	138.1	133.1	134.3	135.6	134.3
130°	122.9	122.9	120.4	120.4	120.4	117.8	120.4	117.8	119.1	120.4	121.6
132.5°	109.0	109.0	105.2	103.9	103.9	103.9	105.2	103.9	106.4	109.0	109.0
135°	97.6	97.6	93.8	95.0	95.0	93.8	95.0	93.8	96.3	97.6	97.6
137.5°	88.7	88.7	86.2	86.2	86.2	84.9	86.2	86.2	87.4	90.0	91.2
140°	81.1	81.1	79.8	79.8	78.6	79.8	79.8	79.8	81.1	82.4	82.4
142.5°	77.3	76.0	74.8	73.5	74.8	74.8	74.8	73.5	74.8	77.3	77.3
145°	71.0	71.0	69.7	69.7	69.7	71.0	69.7	69.7	71.0	71.0	72.2
147.5°	67.2	67.2	65.9	67.2	67.2	67.2	67.2	65.9	67.2	67.2	68.4
150°	65.9	64.6	63.4	64.6	64.6	63.4	63.4	63.4	63.4	64.6	64.6
152.5°	62.1	62.1	60.8	62.1	60.8	60.8	60.8	60.8	60.8	62.1	63.4
155°	59.6	59.6	58.3	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
157.5°	57.0	58.3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	58.3	58.3
160°	55.8	55.8	55.8	55.8	54.5	54.5	54.5	55.8	55.8	55.8	57.0
162.5°	54.5	54.5	54.5	54.5	53.2	53.2	53.2	53.2	54.5	54.5	55.8
165°	54.5	53.2	53.2	53.2	52.0	52.0	52.0	52.0	53.2	54.5	53.2
167.5°	52.0	52.0	52.0	52.0	52.0	50.7	50.7	52.0	52.0	52.0	53.2
170°	52.0	52.0	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	52.0
172.5°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	50.7	50.7	52.0	52.0
175°	52.0	52.0	52.0	52.0	50.7	50.7	50.7	52.0	52.0	52.0	50.7
177.5°	52.0	52.0	52.0	52.0	50.7	52.0	52.0	52.0	52.0	52.0	52.0
180°	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

(END OF REPORT)