

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: P833334

Luminaire Tested: **TTN-D1-830-U-WQ-CG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833334  
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-WQ-CG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

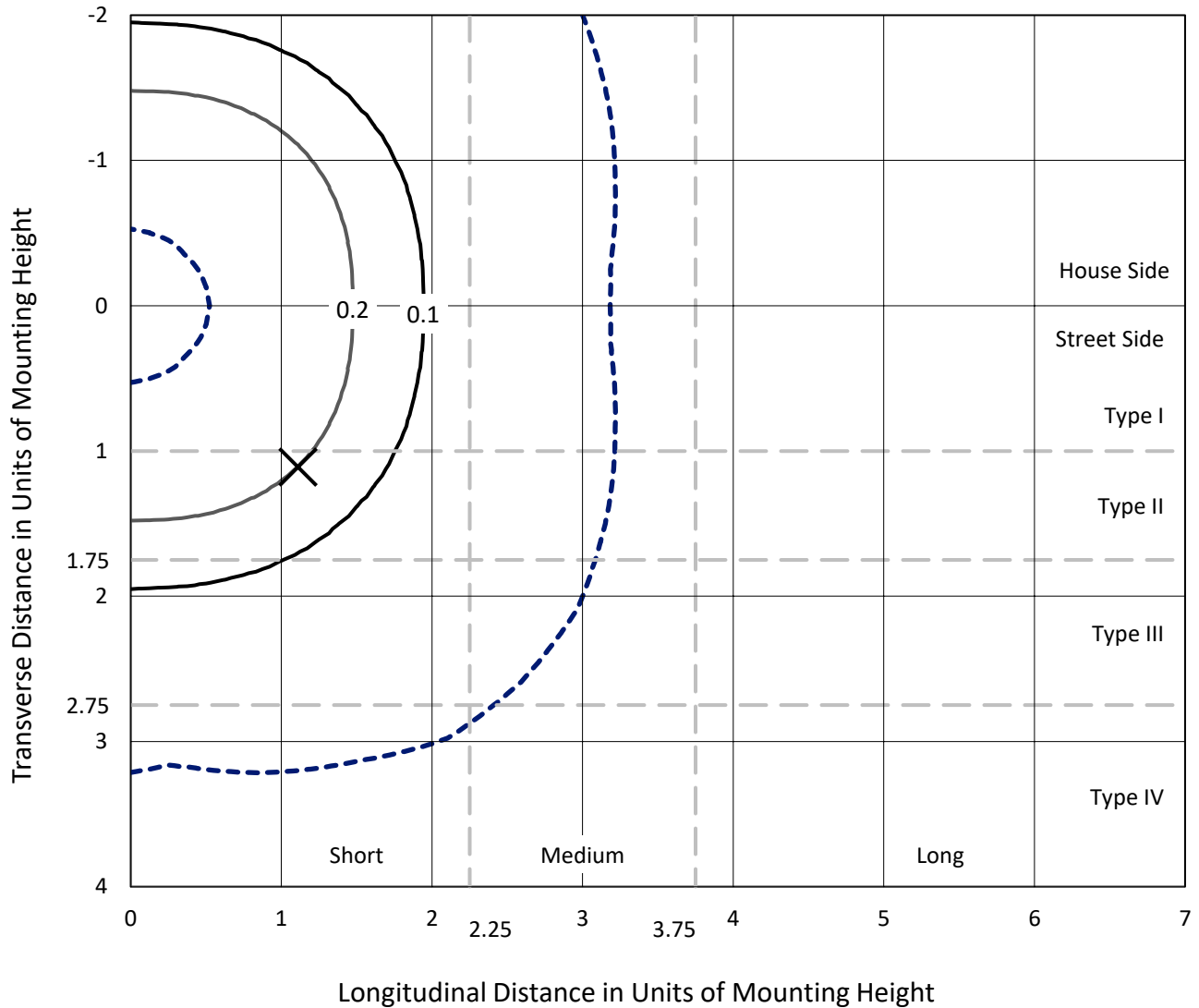
Lumens per Lamp: N/A  
Luminaire Lumens: 3601.7 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

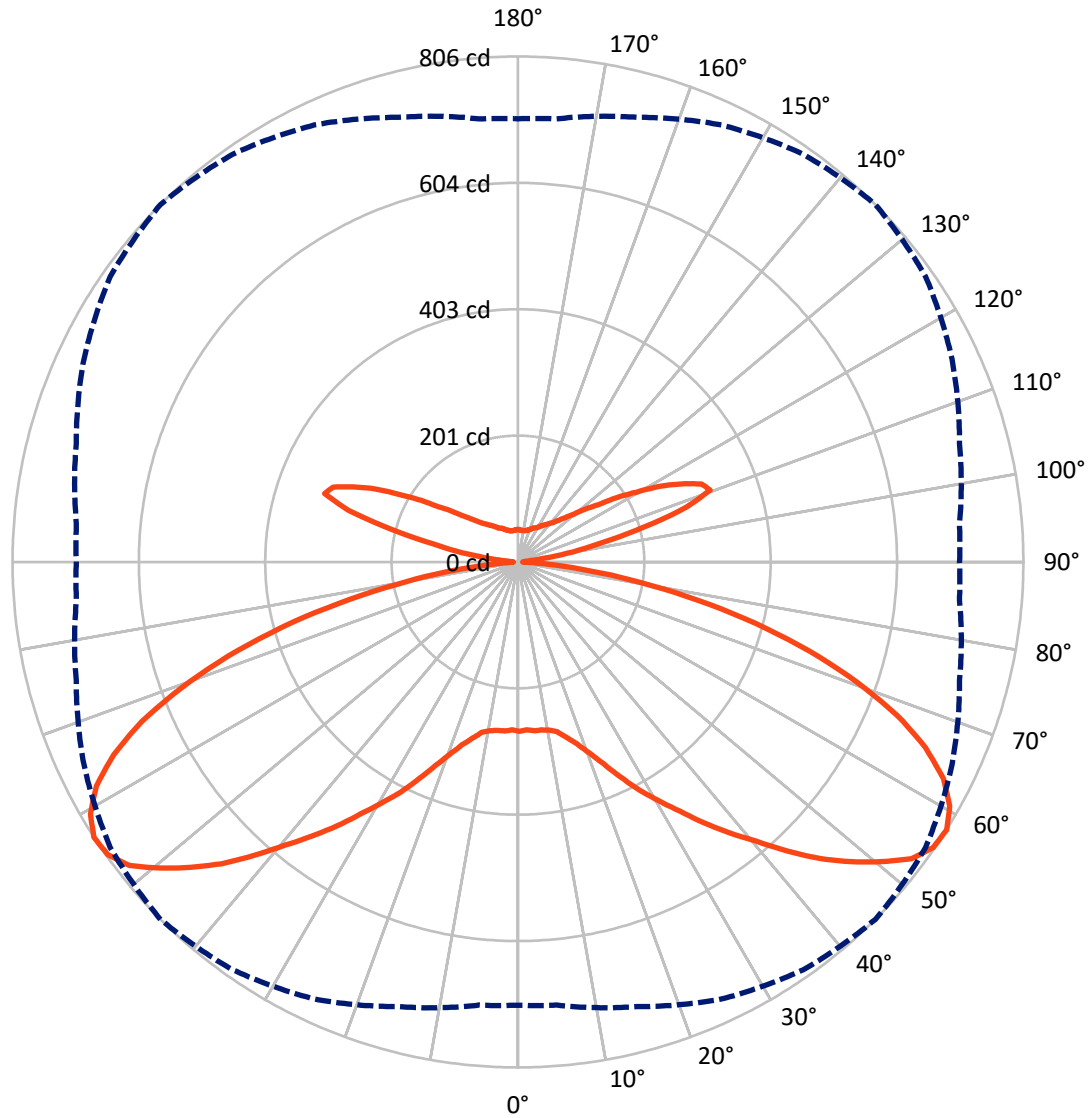
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 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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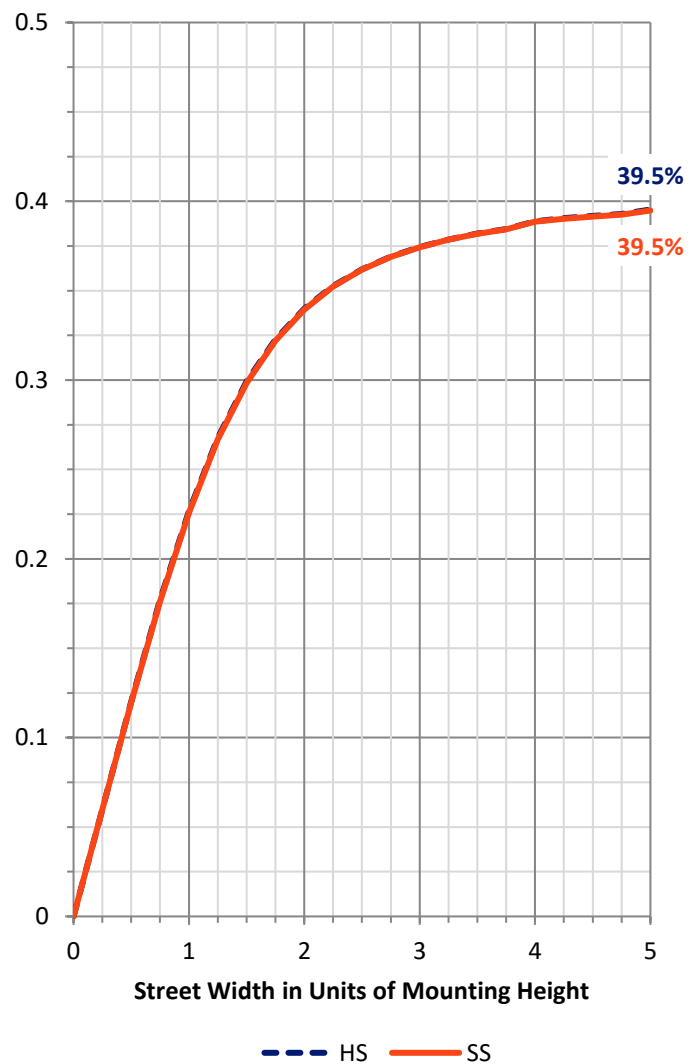
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1430.5	370.3	1800.9
	% Fixture	39.7	10.3	50.0
<b>Street Side</b>	Lumens	1430.5	370.3	1800.9
	% Fixture	39.7	10.3	50.0
<b>Total</b>	Lumens	2861.0	740.7	3601.7
	% Fixture	79.4	20.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.8	0.7
10°-20°	83.3	2.3
20°-30°	175.3	4.9
30°-40°	316.0	8.8
40°-50°	502.3	13.9
50°-60°	670.1	18.6
60°-70°	647.5	18.0
70°-80°	375.2	10.4
80°-90°	65.7	1.8
90°-100°	16.5	0.5
100°-110°	168.0	4.7
110°-120°	245.6	6.8
120°-130°	142.5	4.0
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°	2861.0	79.4
0°-180°	3601.7	100.0



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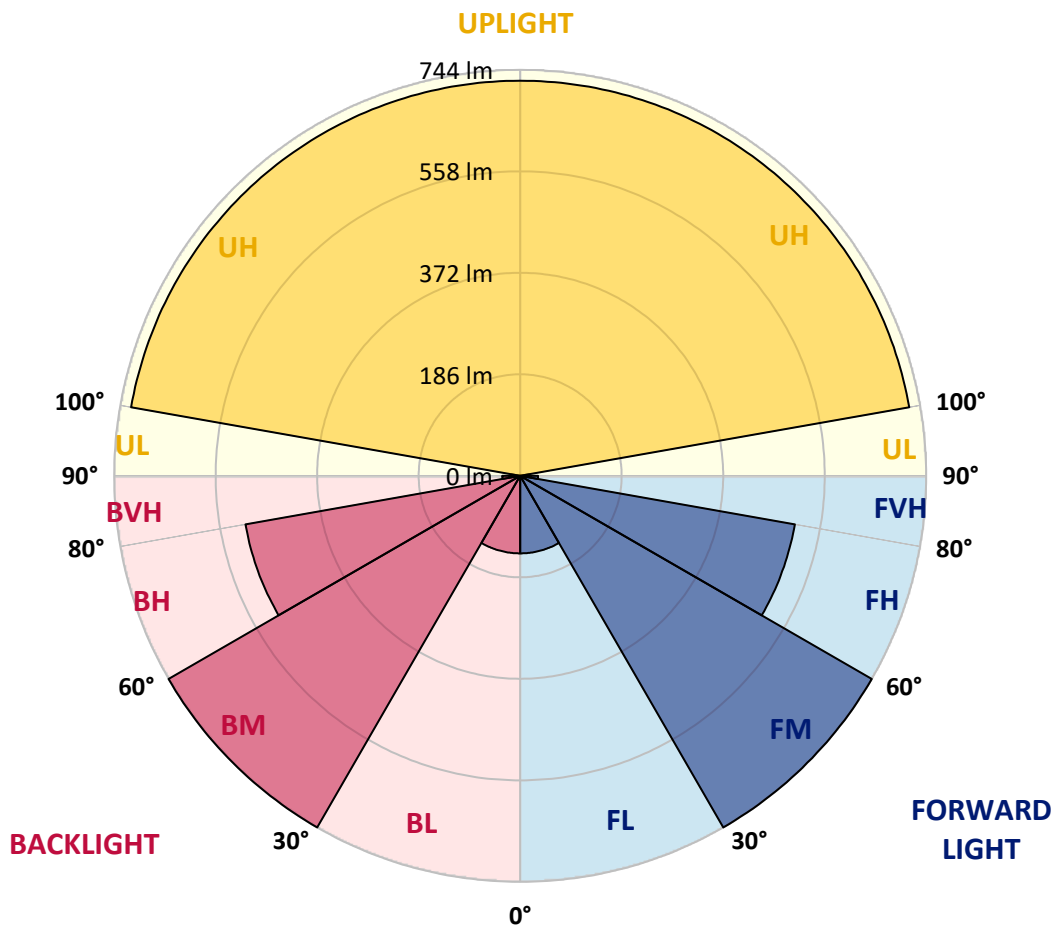
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	142.2	3.9			
FM (30°-60°)	744.2	20.7			
FH (60°-80°)	511.3	14.2			G0/660
FVH (80°-90°)	32.8	0.9			G1/100
BL (0°-30°)	142.2	3.9	B1/500		
BM (30°-60°)	744.2	20.7	B1/1000		
BH (60°-80°)	511.3	14.2	B2/1000		G0/660
BVH (80°-90°)	32.8	0.9			G1/100
UL (90°-100°)	16.5	0.5		U2/50	
UH (100°-180°)	724.2	20.1		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°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2
2.5°	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7	267.7
5°	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2
7.5°	267.7	267.7	270.2	270.2	270.2	270.2	270.2	270.2	270.2	267.7	267.7
10°	270.2	270.2	270.2	272.7	272.7	272.7	272.7	272.7	270.2	270.2	270.2
12.5°	275.1	275.1	277.6	277.6	277.6	277.6	277.6	277.6	277.6	275.1	275.1
15°	287.5	287.5	287.5	290.0	290.0	290.0	290.0	290.0	287.5	287.5	287.5
17.5°	299.9	299.9	302.4	302.4	304.9	304.9	304.9	302.4	302.4	302.4	302.4
20°	317.3	317.3	319.8	319.8	322.2	324.7	324.7	322.2	319.8	319.8	319.8
22.5°	339.6	342.1	342.1	342.1	344.5	349.5	347.0	344.5	342.1	342.1	342.1
25°	366.8	369.3	371.8	371.8	374.3	379.2	379.2	371.8	371.8	371.8	371.8
27.5°	399.1	401.5	404.0	404.0	406.5	411.5	409.0	404.0	404.0	401.5	401.5
30°	428.8	431.3	433.8	436.2	438.7	441.2	441.2	436.2	433.8	431.3	428.8
32.5°	458.6	458.6	463.5	468.5	473.4	473.4	475.9	468.5	463.5	458.6	456.1
35°	488.3	490.8	493.3	500.7	508.1	510.6	508.1	500.7	493.3	488.3	488.3
37.5°	520.5	523.0	525.5	535.4	542.8	547.8	542.8	535.4	525.5	520.5	518.0
40°	555.2	557.7	560.2	572.6	580.0	585.0	577.5	570.1	560.2	555.2	552.7
42.5°	587.4	592.4	597.4	612.2	624.6	629.6	622.1	609.8	599.8	587.4	585.0
45°	627.1	632.1	639.5	654.4	666.8	674.2	664.3	651.9	637.0	627.1	624.6
47.5°	659.3	664.3	671.7	691.6	708.9	713.9	703.9	689.1	669.2	656.9	654.4
50°	684.1	689.1	703.9	726.3	746.1	751.0	741.1	721.3	699.0	681.6	679.2
52.5°	703.9	708.9	726.3	756.0	778.3	785.7	773.3	751.0	721.3	701.5	699.0
55°	713.9	716.3	738.6	770.9	793.2	803.1	790.7	765.9	733.7	711.4	708.9
57.5°	706.4	708.9	733.7	768.4	793.2	805.6	793.2	763.4	728.7	706.4	703.9
60°	691.6	691.6	713.9	753.5	783.3	790.7	778.3	748.6	711.4	689.1	686.6
62.5°	664.3	661.8	689.1	723.8	753.5	761.0	751.0	721.3	684.1	661.8	659.3
65°	612.2	607.3	646.9	679.2	706.4	713.9	706.4	679.2	644.5	609.8	604.8
67.5°	550.3	542.8	580.0	617.2	642.0	651.9	642.0	619.7	580.0	545.3	542.8
70°	485.8	478.4	508.1	540.4	567.6	572.6	562.7	540.4	503.2	480.9	480.9
72.5°	409.0	401.5	428.8	453.6	480.9	485.8	475.9	456.1	428.8	406.5	404.0
75°	324.7	317.3	342.1	361.9	389.2	391.6	386.7	364.4	342.1	319.8	319.8
77.5°	240.4	233.0	252.8	270.2	292.5	292.5	290.0	272.7	252.8	238.0	238.0
80°	158.6	153.7	171.0	178.5	198.3	198.3	195.8	183.4	168.6	158.6	156.2
82.5°	89.2	84.3	99.1	101.6	116.5	116.5	114.0	104.1	94.2	86.8	86.8
85°	34.7	29.7	39.7	42.1	49.6	49.6	47.1	44.6	37.2	32.2	32.2
87.5°	2.5	2.5	5.0	5.0	7.4	7.4	7.4	5.0	5.0	2.5	2.5
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)