

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: P833337

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

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833337  
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-SG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

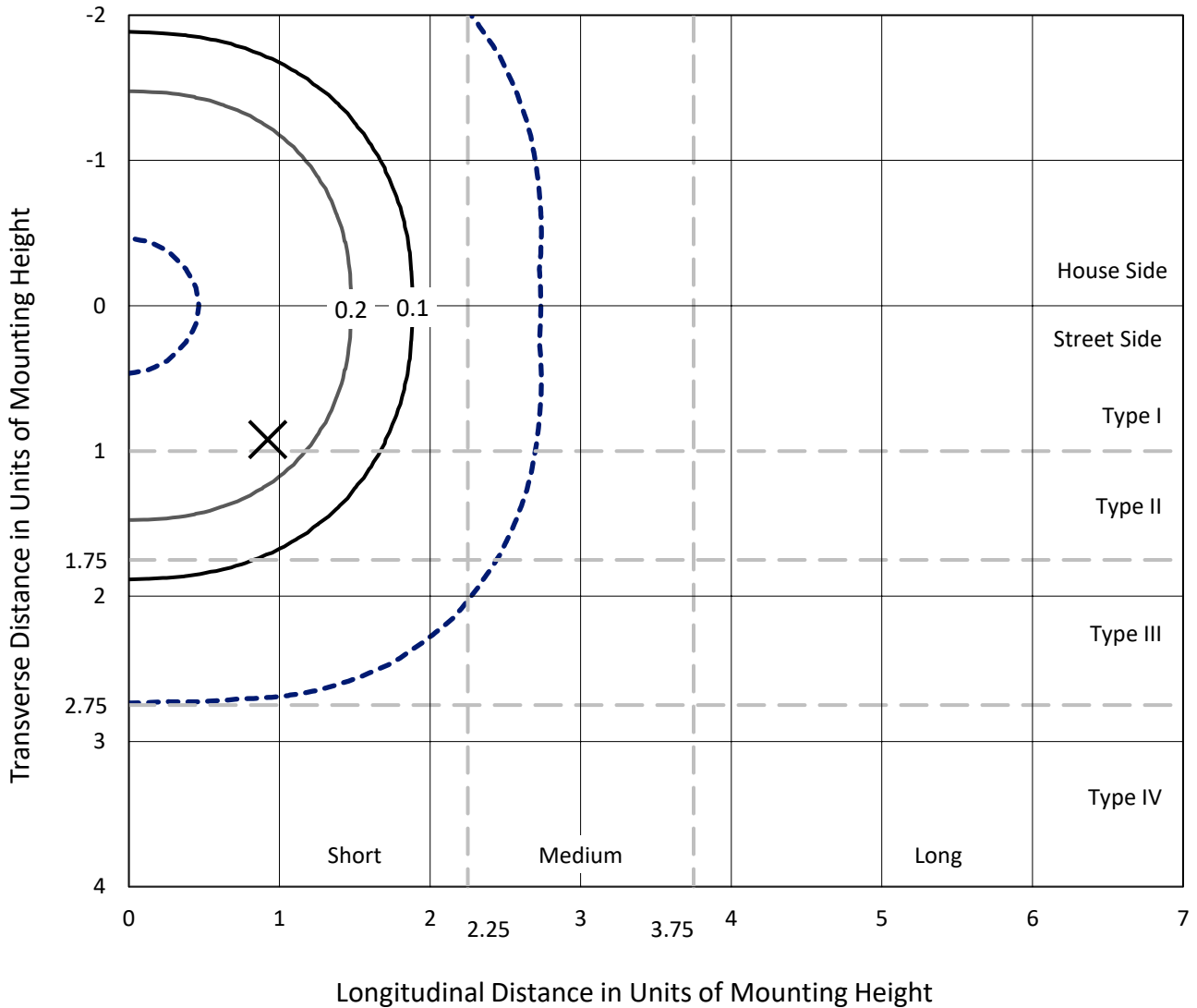
Lumens per Lamp: N/A  
Luminaire Lumens: 3544.7 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 33.4  
Input Voltage (V): NR  
Input Current (Ain): 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

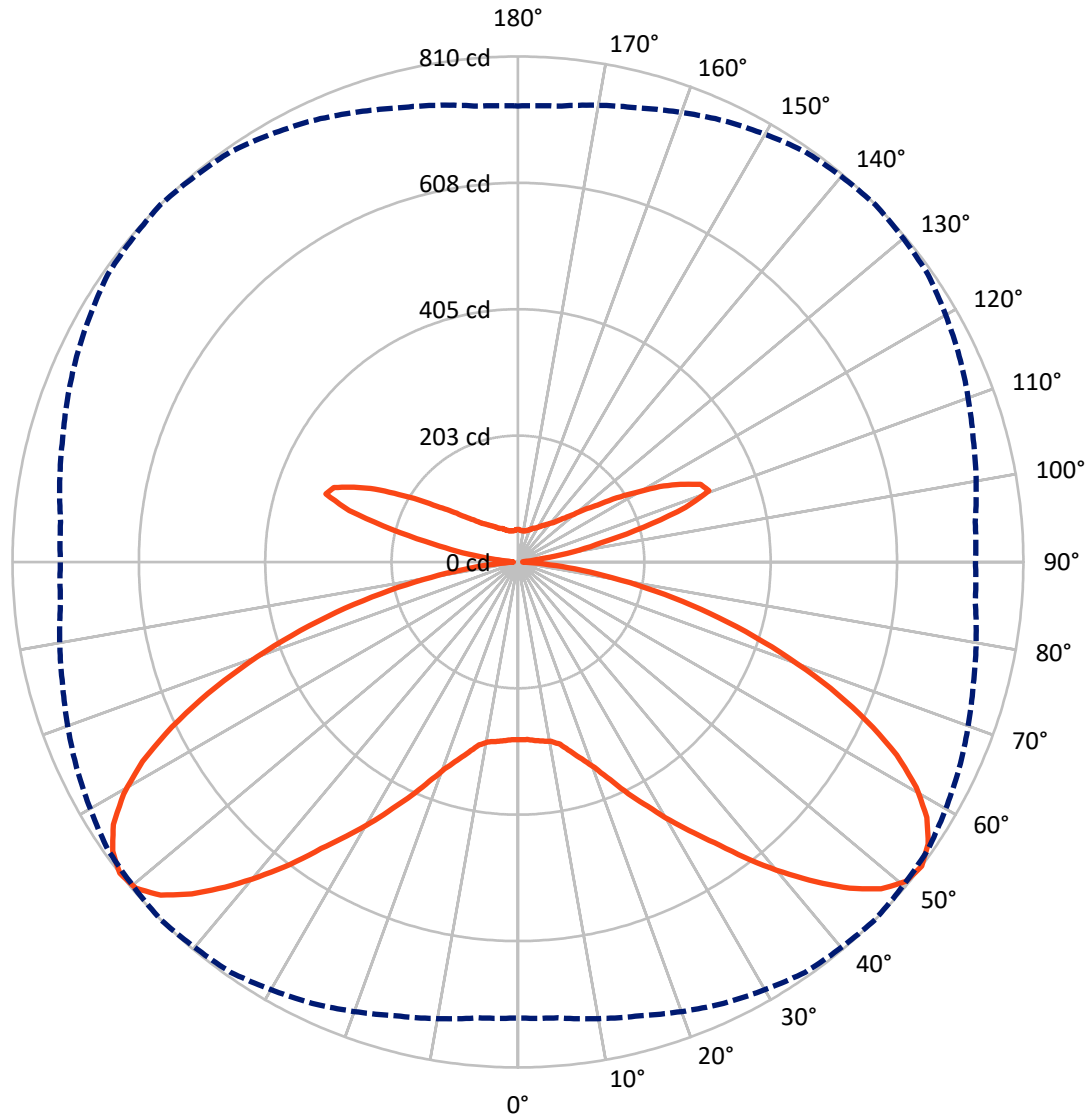
✕ Max cd  
 - - - 1/2 Max cd



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 52.5-Deg Vertical

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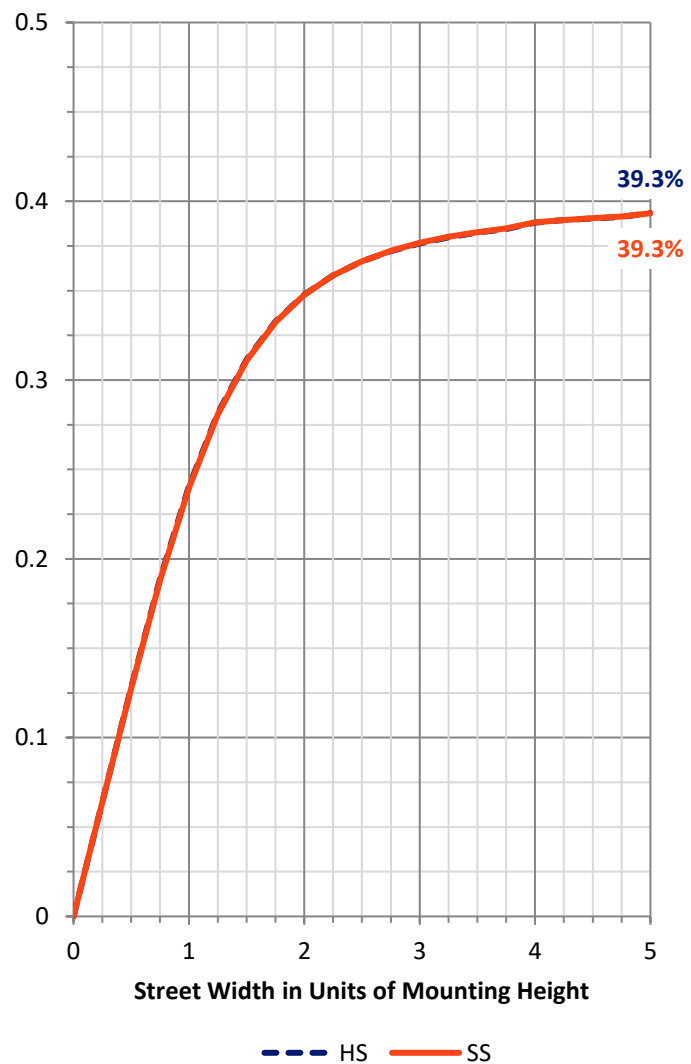
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1402.0	370.3	1772.4
	% Fixture	39.6	10.4	50.0
<b>Street Side</b>	Lumens	1402.0	370.3	1772.4
	% Fixture	39.6	10.4	50.0
<b>Total</b>	Lumens	2804.0	740.7	3544.7
	% Fixture	79.1	20.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	0.8
10°-20°	90.5	2.6
20°-30°	190.9	5.4
30°-40°	348.7	9.8
40°-50°	555.2	15.7
50°-60°	671.3	18.9
60°-70°	564.4	15.9
70°-80°	299.2	8.4
80°-90°	56.4	1.6
90°-100°	16.5	0.5
100°-110°	168.0	4.7
110°-120°	245.6	6.9
120°-130°	142.5	4.0
130°-140°	75.5	2.1
140°-150°	44.9	1.3
150°-160°	27.6	0.8
160°-170°	15.1	0.4
170°-180°	4.9	0.1
0°-90°	2804.0	79.1
0°-180°	3544.7	100.0



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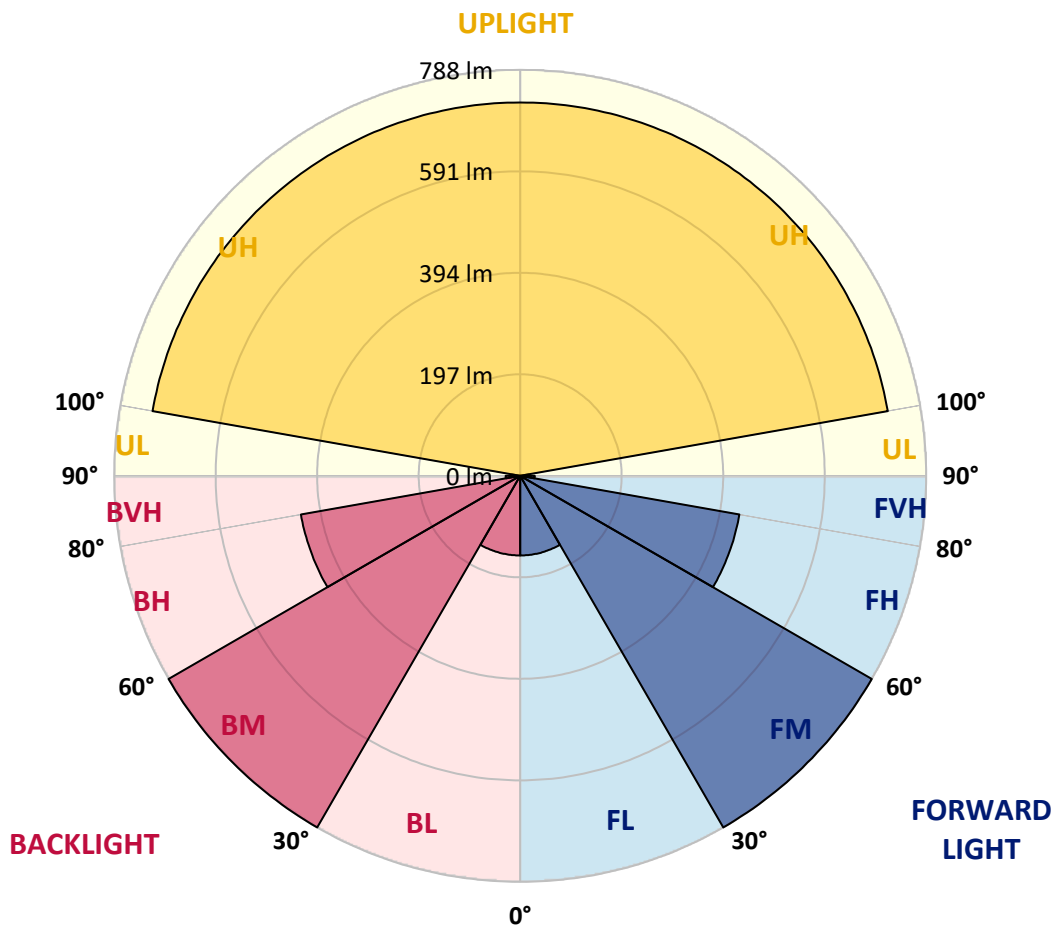
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	154.4	4.4			
FM (30°-60°)	787.6	22.2			
FH (60°-80°)	431.8	12.2			G0/660
FVH (80°-90°)	28.2	0.8			G1/100
BL (0°-30°)	154.4	4.4	B1/500		
BM (30°-60°)	787.6	22.2	B1/1000		
BH (60°-80°)	431.8	12.2	B1/500		G0/660
BVH (80°-90°)	28.2	0.8			G1/100
UL (90°-100°)	16.5	0.5		U2/50	
UH (100°-180°)	724.2	20.4		U4/1000	

**BUG Rating: B1-U4-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
5°	287.5	287.5	285.0	287.5	287.5	287.5	287.5	287.5	287.5	287.5	287.5
7.5°	287.5	287.5	287.5	289.9	289.9	289.9	289.9	287.5	287.5	287.5	287.5
10°	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4
12.5°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
15°	312.2	312.2	312.2	312.2	314.7	314.7	314.7	312.2	312.2	312.2	312.2
17.5°	327.1	327.1	329.6	329.6	332.1	332.1	332.1	329.6	327.1	329.6	327.1
20°	349.4	349.4	349.4	351.9	354.4	354.4	354.4	349.4	349.4	349.4	349.4
22.5°	374.2	374.2	374.2	376.7	379.1	379.1	379.1	374.2	374.2	374.2	374.2
25°	403.9	403.9	403.9	406.4	408.9	411.4	411.4	406.4	403.9	403.9	401.4
27.5°	433.7	433.7	438.6	441.1	443.6	443.6	443.6	438.6	436.1	436.1	436.1
30°	468.3	468.3	473.3	475.8	480.7	480.7	480.7	473.3	470.8	468.3	468.3
32.5°	500.6	503.0	508.0	513.0	517.9	517.9	520.4	510.5	505.5	503.0	503.0
35°	535.3	537.7	542.7	550.1	555.1	557.6	560.0	550.1	542.7	540.2	540.2
37.5°	574.9	577.4	584.8	592.2	602.2	607.1	609.6	594.7	582.3	577.4	577.4
40°	619.5	622.0	629.4	639.3	649.2	654.2	656.7	641.8	629.4	624.5	622.0
42.5°	656.7	661.6	669.1	683.9	693.8	701.3	701.3	683.9	669.1	661.6	661.6
45°	691.4	696.3	708.7	723.6	738.5	745.9	743.4	726.1	708.7	698.8	696.3
47.5°	718.6	723.6	738.5	755.8	775.6	783.1	780.6	760.8	738.5	726.1	723.6
50°	733.5	736.0	753.3	778.1	797.9	805.4	800.4	780.6	755.8	738.5	736.0
52.5°	731.0	733.5	753.3	780.6	802.9	810.3	802.9	780.6	755.8	736.0	733.5
55°	716.2	718.6	738.5	768.2	790.5	797.9	790.5	768.2	740.9	721.1	718.6
57.5°	688.9	691.4	711.2	740.9	765.7	773.1	763.2	738.5	711.2	691.4	691.4
60°	649.2	651.7	671.5	703.8	726.1	733.5	721.1	701.3	674.0	651.7	649.2
62.5°	597.2	597.2	619.5	651.7	671.5	681.5	669.1	646.8	622.0	597.2	599.7
65°	535.3	532.8	555.1	584.8	607.1	614.6	602.2	582.3	557.6	535.3	535.3
67.5°	470.8	470.8	488.2	513.0	532.8	540.2	527.8	510.5	490.7	470.8	470.8
70°	401.4	401.4	413.8	438.6	456.0	460.9	453.5	436.1	418.8	401.4	401.4
72.5°	332.1	329.6	342.0	361.8	376.7	381.6	374.2	364.3	344.4	332.1	332.1
75°	262.7	260.2	267.6	285.0	297.4	302.3	294.9	287.5	272.6	262.7	262.7
77.5°	195.8	193.3	200.7	215.6	223.0	225.5	220.5	215.6	203.2	195.8	195.8
80°	133.8	131.3	136.3	146.2	153.6	153.6	151.2	148.7	138.8	133.8	136.3
82.5°	79.3	76.8	81.8	89.2	94.2	91.7	91.7	89.2	81.8	79.3	79.3
85°	34.7	32.2	34.7	39.6	44.6	42.1	42.1	42.1	37.2	34.7	34.7
87.5°	5.0	5.0	5.0	7.4	9.9	7.4	7.4	7.4	5.0	5.0	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)