

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: P832977

Luminaire Tested: **TTN-D0-830-U-WQ-SG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832977  
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-D0-830-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**

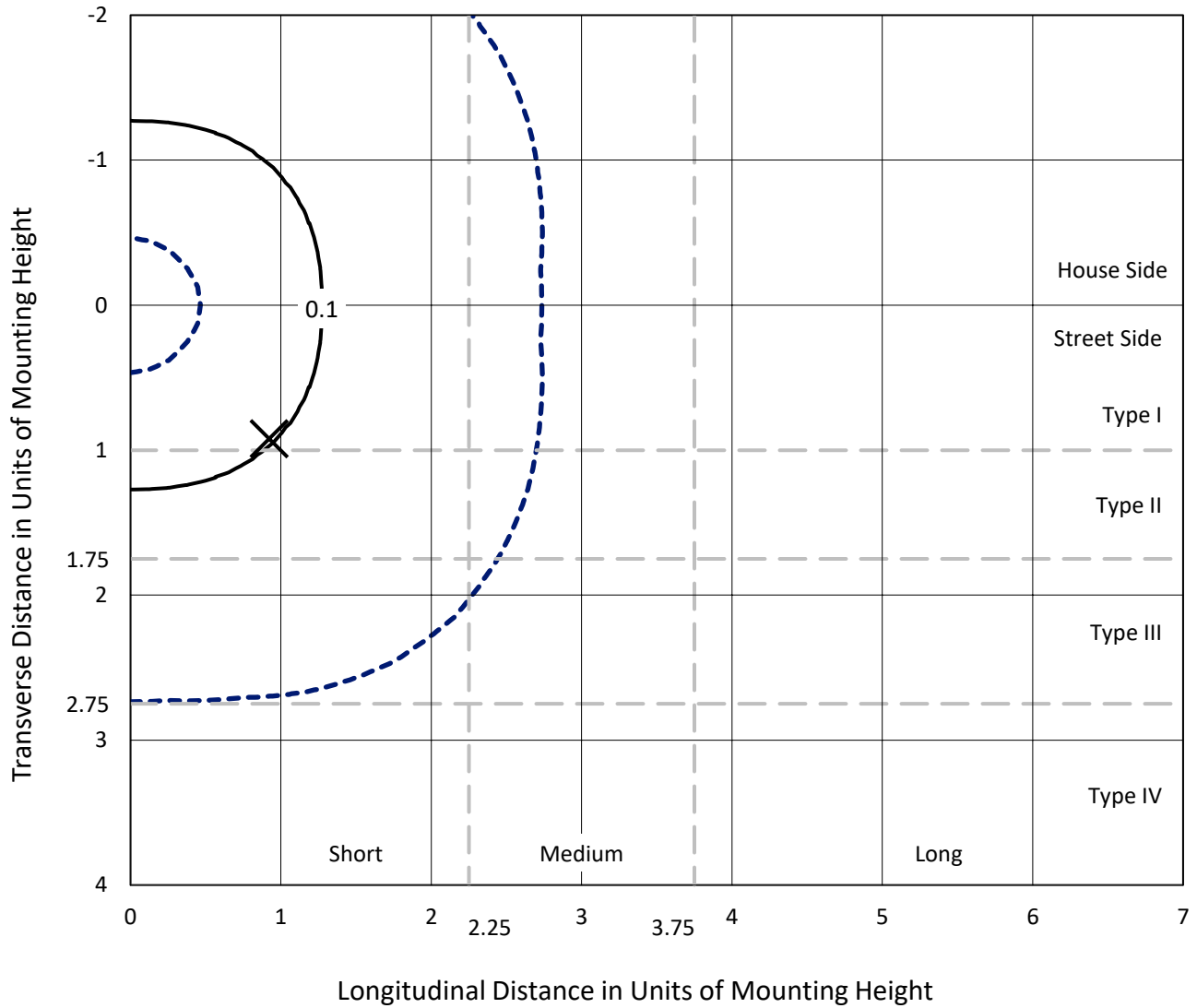
Lumens per Lamp: N/A  
Luminaire Lumens: 1754.7 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 17.7  
Input Voltage (V): NR  
Input Current (Ain): 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



REPORT NUMBER: P832977  
 CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

### Iso-Footcandle Lines of Horizontal Illumination

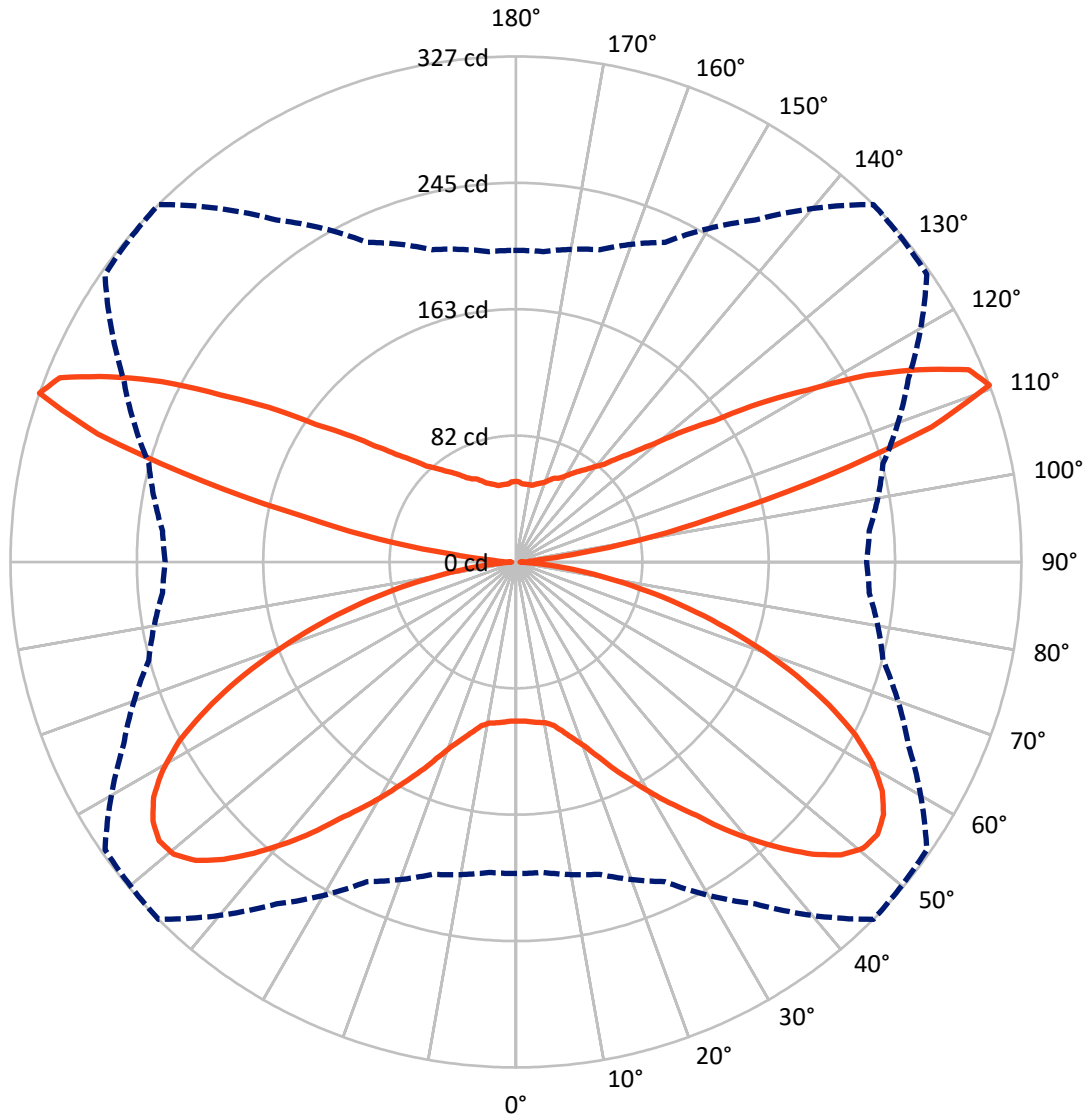
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc  
 Type V - Short - N/A

REPORT NUMBER: P832977  
CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 110-Deg Vertical

REPORT NUMBER: P832977  
 CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

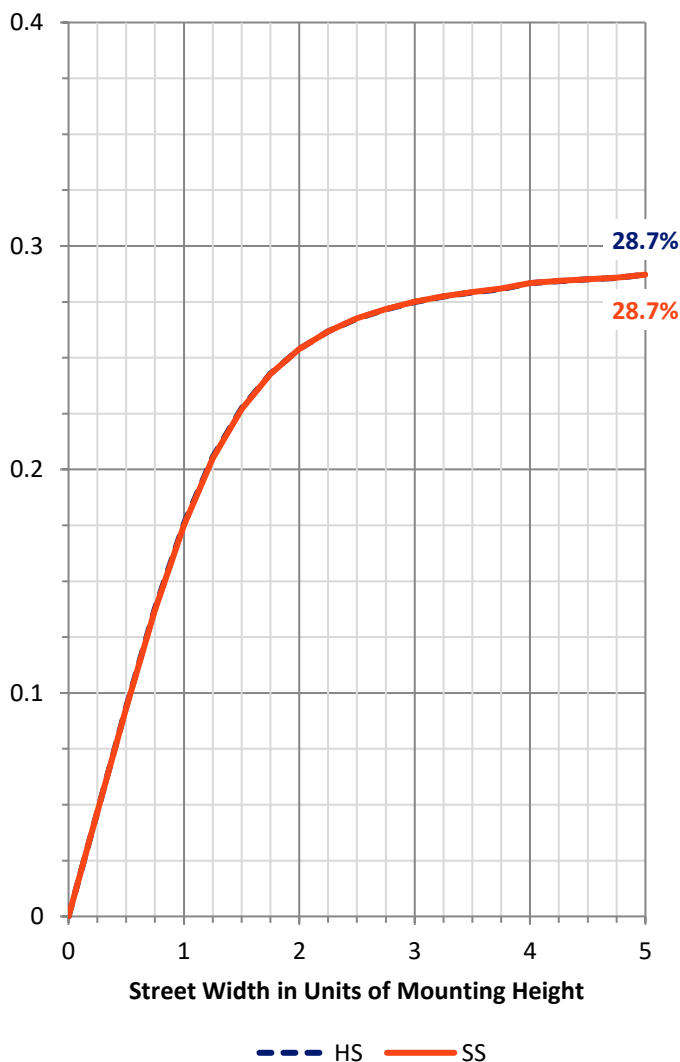
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	507.0	370.3	877.3
	% Fixture	28.9	21.1	50.0
<b>Street Side</b>	Lumens	507.0	370.3	877.3
	% Fixture	28.9	21.1	50.0
<b>Total</b>	Lumens	1014.0	740.7	1754.7
	% Fixture	57.8	42.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.0	0.6
10°-20°	32.7	1.9
20°-30°	69.0	3.9
30°-40°	126.0	7.2
40°-50°	200.6	11.4
50°-60°	242.6	13.8
60°-70°	204.0	11.6
70°-80°	108.1	6.2
80°-90°	21.0	1.2
90°-100°	16.5	0.9
100°-110°	168.0	9.6
110°-120°	245.6	14.0
120°-130°	142.5	8.1
130°-140°	75.5	4.3
140°-150°	44.9	2.6
150°-160°	27.6	1.6
160°-170°	15.1	0.9
170°-180°	4.9	0.3
0°-90°	1014.0	57.8
0°-180°	1754.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P832977

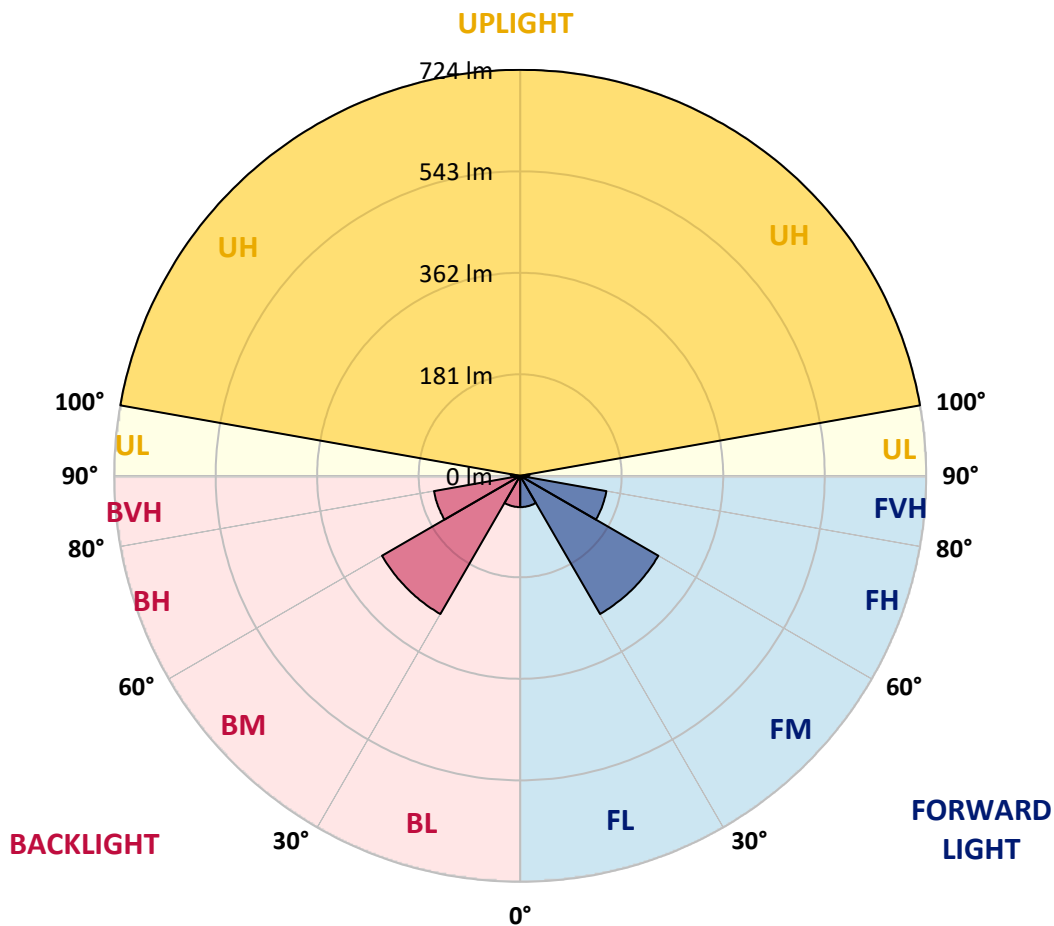
CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	55.8	3.2			
FM (30°-60°)	284.6	16.2			
FH (60°-80°)	156.1	8.9			G0/660
FVH (80°-90°)	10.5	0.6			G1/100
BL (0°-30°)	55.8	3.2	B0/110		
BM (30°-60°)	284.6	16.2	B1/1000		
BH (60°-80°)	156.1	8.9	B1/500		G0/660
BVH (80°-90°)	10.5	0.6			G1/100
UL (90°-100°)	16.5	0.9		U2/50	
UH (100°-180°)	724.2	41.3		U4/1000	

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

Type V Short





REPORT NUMBER: P832977

CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
2.5°	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0
5°	103.9	103.9	103.0	103.9	103.9	103.9	103.9	103.9	103.9	103.9	103.9
7.5°	103.9	103.9	103.9	104.8	104.8	104.8	104.8	103.9	103.9	103.9	103.9
10°	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7
12.5°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
15°	112.8	112.8	112.8	112.8	113.7	113.7	113.7	112.8	112.8	112.8	112.8
17.5°	118.2	118.2	119.1	119.1	120.0	120.0	120.0	119.1	118.2	119.1	118.2
20°	126.3	126.3	126.3	127.2	128.1	127.2	128.1	126.3	126.3	126.3	126.3
22.5°	135.2	135.2	135.2	136.1	137.0	137.0	137.0	135.2	135.2	135.2	135.2
25°	146.0	146.0	146.0	146.9	147.8	148.7	148.7	146.9	146.0	146.0	145.1
27.5°	156.7	156.7	158.5	159.4	160.3	160.3	160.3	158.5	157.6	157.6	157.6
30°	169.3	169.3	171.1	171.9	173.7	173.7	173.7	171.1	170.2	169.3	169.3
32.5°	180.9	181.8	183.6	185.4	187.2	187.2	188.1	184.5	182.7	181.8	181.8
35°	193.4	194.3	196.1	198.8	200.6	201.5	202.4	198.8	196.1	195.2	195.2
37.5°	207.8	208.7	211.4	214.0	217.6	219.4	220.3	214.9	210.5	208.7	208.7
40°	223.9	224.8	227.5	231.1	234.6	236.4	237.3	231.9	227.5	225.7	224.8
42.5°	237.3	239.1	241.8	247.2	250.8	253.4	253.4	247.2	241.8	239.1	239.1
45°	249.9	251.7	256.1	261.5	266.9	269.6	268.7	262.4	256.1	252.5	251.7
47.5°	259.7	261.5	266.9	273.1	280.3	283.0	282.1	274.9	266.9	262.4	261.5
50°	265.1	266.0	272.2	281.2	288.4	291.1	289.3	282.1	273.1	266.9	266.0
52.5°	264.2	265.1	272.2	282.1	290.2	292.8	290.2	282.1	273.1	266.0	265.1
55°	258.8	259.7	266.9	277.6	285.7	288.4	285.7	277.6	267.8	260.6	259.7
57.5°	249.0	249.9	257.0	267.8	276.7	279.4	275.8	266.9	257.0	249.9	249.9
60°	234.6	235.5	242.7	254.3	262.4	265.1	260.6	253.4	243.6	235.5	234.6
62.5°	215.8	215.8	223.9	235.5	242.7	246.3	241.8	233.7	224.8	215.8	216.7
65°	193.4	192.5	200.6	211.4	219.4	222.1	217.6	210.5	201.5	193.4	193.4
67.5°	170.2	170.2	176.4	185.4	192.5	195.2	190.8	184.5	177.3	170.2	170.2
70°	145.1	145.1	149.6	158.5	164.8	166.6	163.9	157.6	151.3	145.1	145.1
72.5°	120.0	119.1	123.6	130.8	136.1	137.9	135.2	131.6	124.5	120.0	120.0
75°	94.9	94.0	96.7	103.0	107.5	109.3	106.6	103.9	98.5	94.9	94.9
77.5°	70.7	69.9	72.5	77.9	80.6	81.5	79.7	77.9	73.4	70.7	70.7
80°	48.4	47.5	49.3	52.8	55.5	55.5	54.6	53.7	50.2	48.4	49.3
82.5°	28.7	27.8	29.6	32.2	34.0	33.1	33.1	32.2	29.6	28.7	28.7
85°	12.5	11.6	12.5	14.3	16.1	15.2	15.2	15.2	13.4	12.5	12.5
87.5°	1.8	1.8	1.8	2.7	3.6	2.7	2.7	2.7	1.8	1.8	1.8
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



REPORT NUMBER: P832977  
 CATALOG NUMBER: TTN-D0-830-U-WQ-SG-UPL3

**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)