

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: P833312

Luminaire Tested: **TTN-D1-830-U-CQ-UPL2**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833312  
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-CQ-UPL2  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

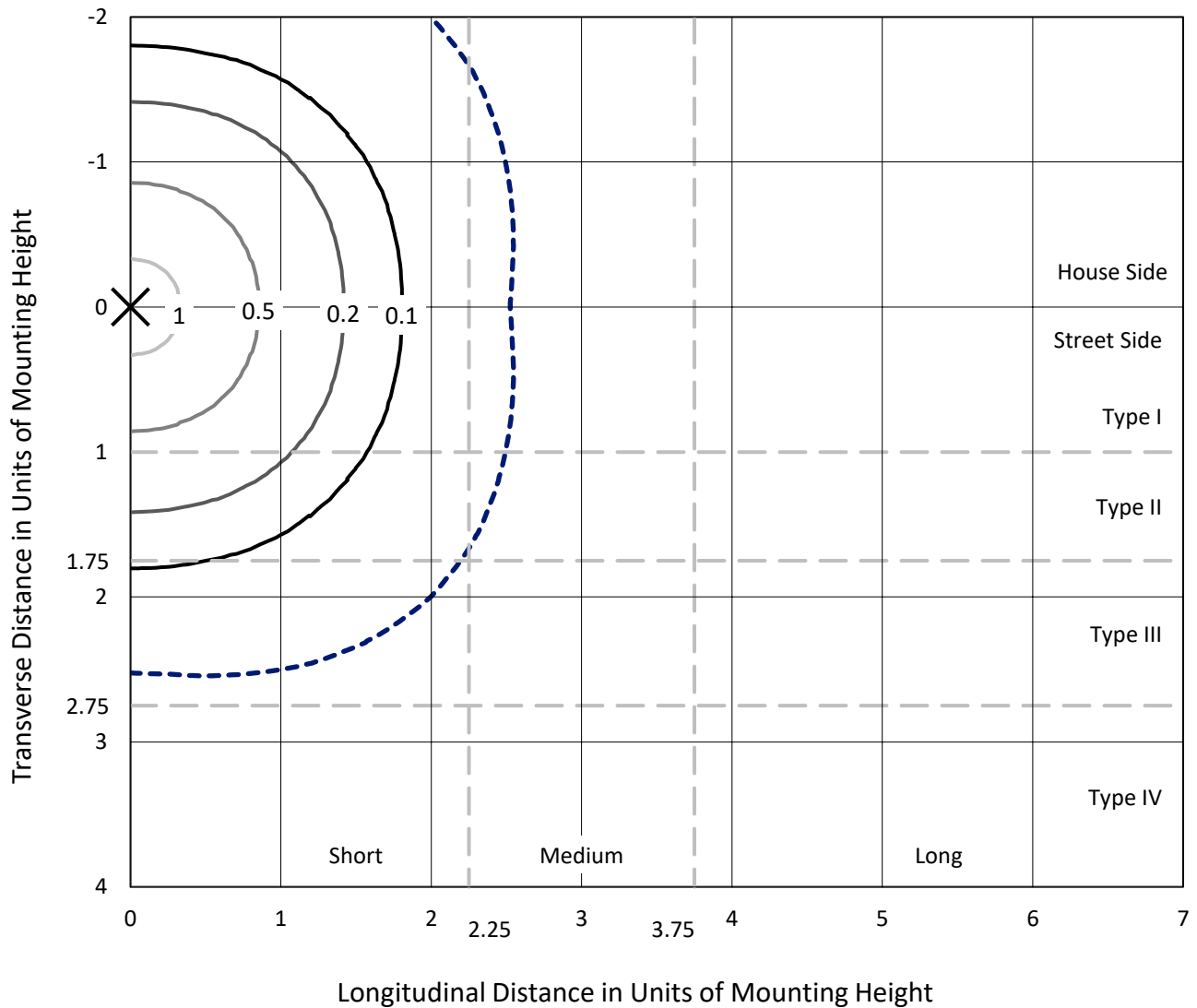
Lumens per Lamp: N/A  
Luminaire Lumens: 3563.8 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): NR  
Input Current (Ain): 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

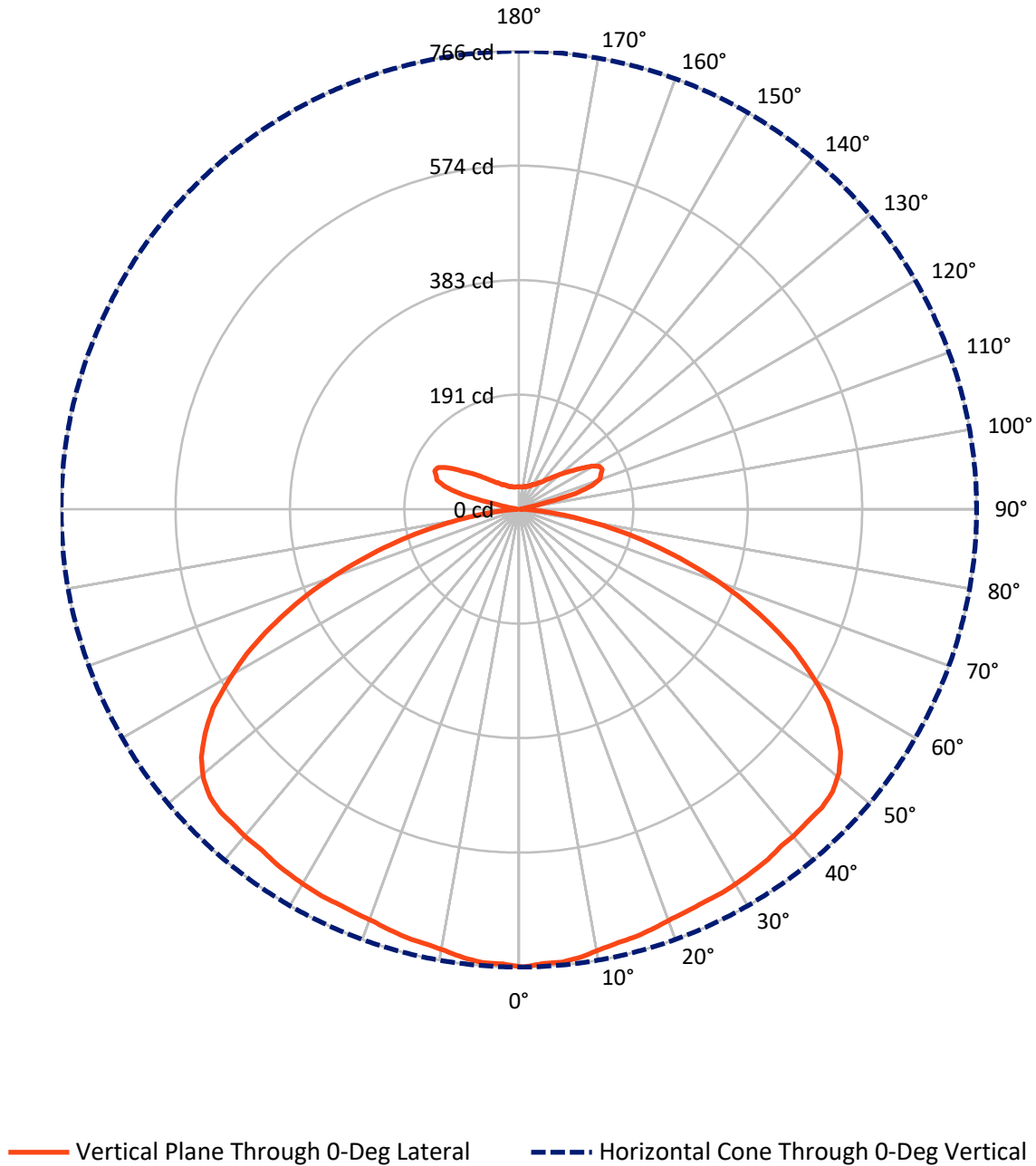
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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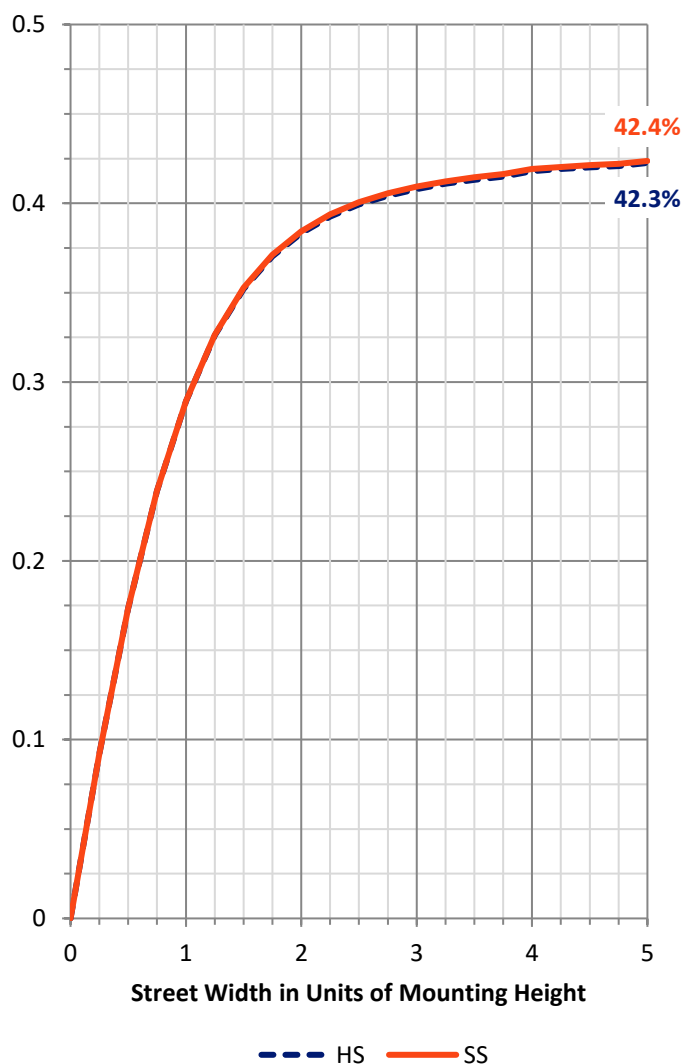
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1514.9	267.0	1781.9
	% Fixture	42.5	7.5	50.0
<b>Street Side</b>	Lumens	1514.9	267.0	1781.9
	% Fixture	42.5	7.5	50.0
<b>Total</b>	Lumens	3029.7	534.0	3563.8
	% Fixture	85.0	15.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.2	2.0
10°-20°	209.7	5.9
20°-30°	337.7	9.5
30°-40°	454.2	12.7
40°-50°	560.4	15.7
50°-60°	601.2	16.9
60°-70°	487.5	13.7
70°-80°	258.4	7.3
80°-90°	48.5	1.4
90°-100°	11.9	0.3
100°-110°	121.1	3.4
110°-120°	177.1	5.0
120°-130°	102.8	2.9
130°-140°	54.4	1.5
140°-150°	32.3	0.9
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	3029.7	85.0
0°-180°	3563.8	100.0

**Coefficient of Utilization**



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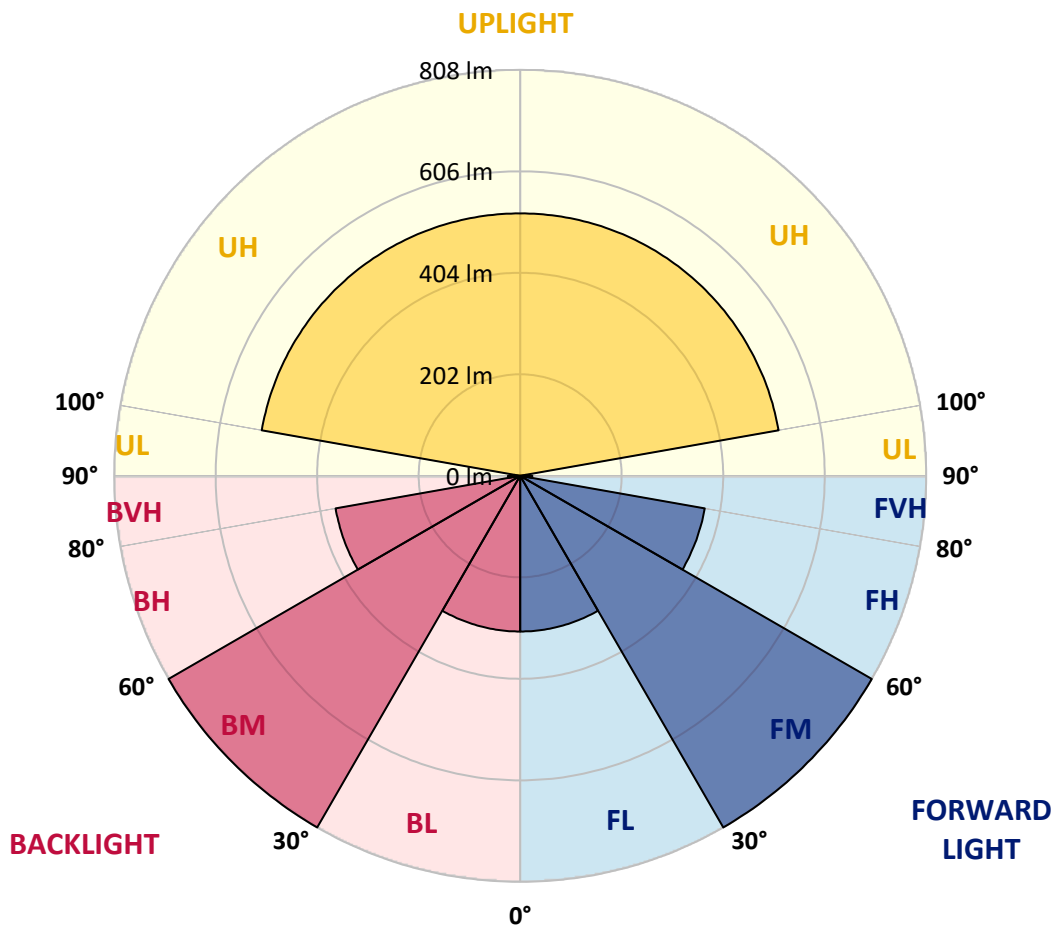
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	309.8	8.7			
FM (30°-60°)	807.9	22.7			
FH (60°-80°)	373.0	10.5			G0/660
FVH (80°-90°)	24.3	0.7			G1/100
BL (0°-30°)	309.8	8.7	B1/500		
BM (30°-60°)	807.9	22.7	B1/1000		
BH (60°-80°)	373.0	10.5	B1/500		G0/660
BVH (80°-90°)	24.3	0.7			G1/100
UL (90°-100°)	11.9	0.3		U2/50	
UH (100°-180°)	522.1	14.7		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°	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9
2.5°	761.0	761.0	761.0	761.0	761.0	761.0	761.0	761.0	761.0	761.0	763.4
5°	761.0	761.0	761.0	761.0	758.5	761.0	761.0	761.0	761.0	761.0	761.0
7.5°	756.0	756.0	756.0	756.0	756.0	756.0	756.0	756.0	756.0	756.0	756.0
10°	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6
12.5°	743.6	743.6	743.6	743.6	743.6	743.6	743.6	743.6	743.6	743.6	743.6
15°	741.1	741.1	741.1	741.1	741.1	741.1	741.1	741.1	741.1	738.7	738.7
17.5°	736.2	736.2	736.2	736.2	738.7	738.7	738.7	736.2	736.2	736.2	736.2
20°	731.2	731.2	731.2	733.7	733.7	733.7	733.7	733.7	731.2	731.2	731.2
22.5°	728.7	728.7	728.7	728.7	731.2	731.2	731.2	731.2	728.7	728.7	728.7
25°	726.3	726.3	728.7	728.7	731.2	731.2	731.2	728.7	728.7	726.3	726.3
27.5°	726.3	726.3	728.7	728.7	731.2	731.2	731.2	731.2	728.7	726.3	726.3
30°	723.8	726.3	726.3	728.7	731.2	731.2	731.2	728.7	726.3	723.8	723.8
32.5°	721.3	721.3	723.8	726.3	728.7	728.7	728.7	726.3	723.8	721.3	718.8
35°	718.8	718.8	718.8	723.8	726.3	726.3	726.3	723.8	718.8	716.4	716.4
37.5°	713.9	716.4	718.8	721.3	726.3	726.3	726.3	721.3	716.4	713.9	711.4
40°	713.9	713.9	718.8	721.3	728.7	728.7	726.3	721.3	716.4	711.4	708.9
42.5°	711.4	713.9	718.8	726.3	733.7	733.7	731.2	723.8	716.4	711.4	708.9
45°	711.4	711.4	718.8	728.7	738.7	741.1	736.2	728.7	718.8	708.9	708.9
47.5°	706.4	706.4	716.4	728.7	741.1	743.6	741.1	728.7	716.4	708.9	706.4
50°	694.0	694.0	706.4	721.3	736.2	741.1	736.2	726.3	708.9	699.0	696.5
52.5°	674.2	674.2	686.6	706.4	721.3	728.7	723.8	711.4	694.0	679.2	676.7
55°	644.5	646.9	659.3	681.6	699.0	706.4	701.5	686.6	666.8	651.9	646.9
57.5°	609.8	609.8	627.1	649.4	666.8	674.2	669.3	654.4	632.1	617.2	612.2
60°	562.7	565.1	580.0	609.8	627.1	634.6	629.6	612.2	587.5	570.1	565.1
62.5°	515.6	518.1	532.9	557.7	577.5	582.5	577.5	560.2	537.9	520.5	515.6
65°	461.0	463.5	480.9	503.2	518.1	525.5	518.1	503.2	483.4	466.0	463.5
67.5°	404.0	406.5	423.9	443.7	458.6	463.5	456.1	443.7	423.9	409.0	404.0
70°	344.5	347.0	361.9	379.2	391.6	396.6	391.6	376.8	361.9	347.0	344.5
72.5°	282.6	285.1	299.9	314.8	324.7	329.7	322.2	312.3	297.4	285.1	282.6
75°	223.1	223.1	235.5	247.9	257.8	260.3	255.3	247.9	235.5	225.6	220.6
77.5°	166.1	166.1	178.5	185.9	190.9	195.8	190.9	183.4	176.0	166.1	166.1
80°	111.5	111.5	121.5	126.4	131.4	133.9	131.4	126.4	121.5	114.0	111.5
82.5°	66.9	66.9	71.9	76.8	76.8	79.3	79.3	76.8	71.9	66.9	66.9
85°	29.7	27.3	32.2	34.7	34.7	37.2	37.2	34.7	32.2	29.7	29.7
87.5°	2.5	5.0	5.0	7.4	7.4	7.4	7.4	7.4	5.0	5.0	5.0
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)