

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: P833173

Luminaire Tested: **TTN-D1-735-U-MQ-UPL1**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833173  
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-D1-735-U-MQ-UPL1  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND MEDIUM DISTRIBUTION  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3641.9 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B2 - U3 - G1

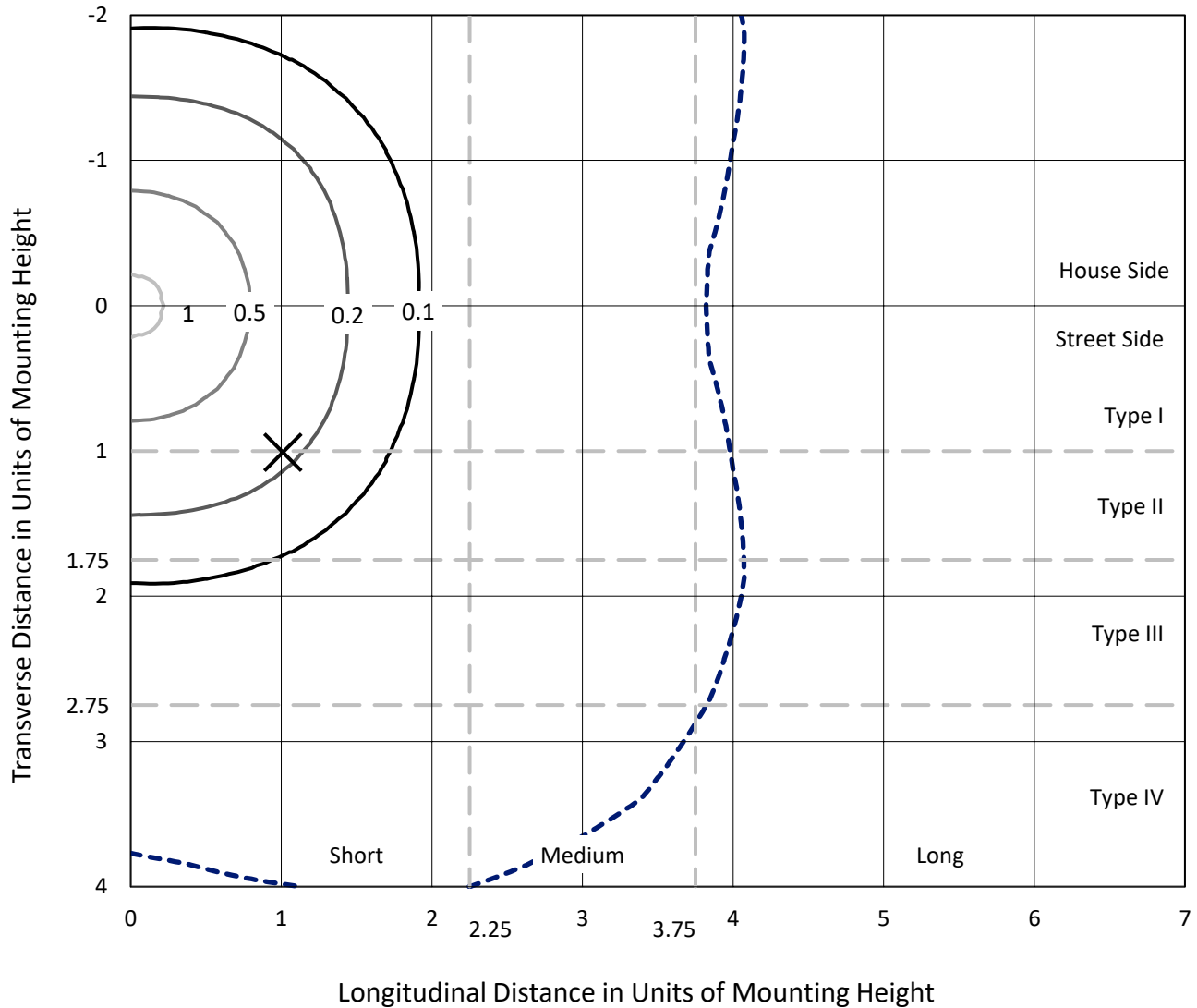
Input Watts (W): 29  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

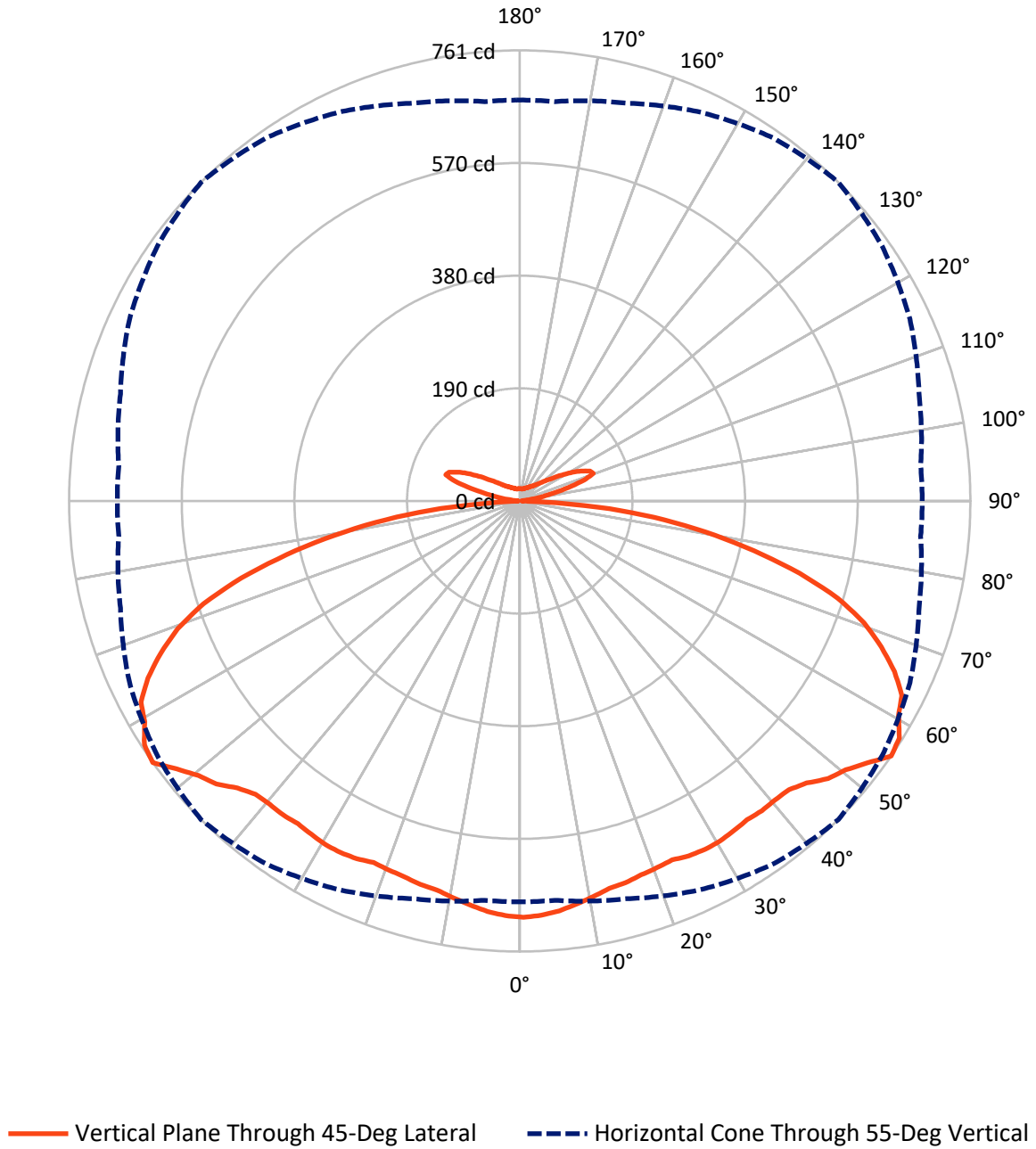
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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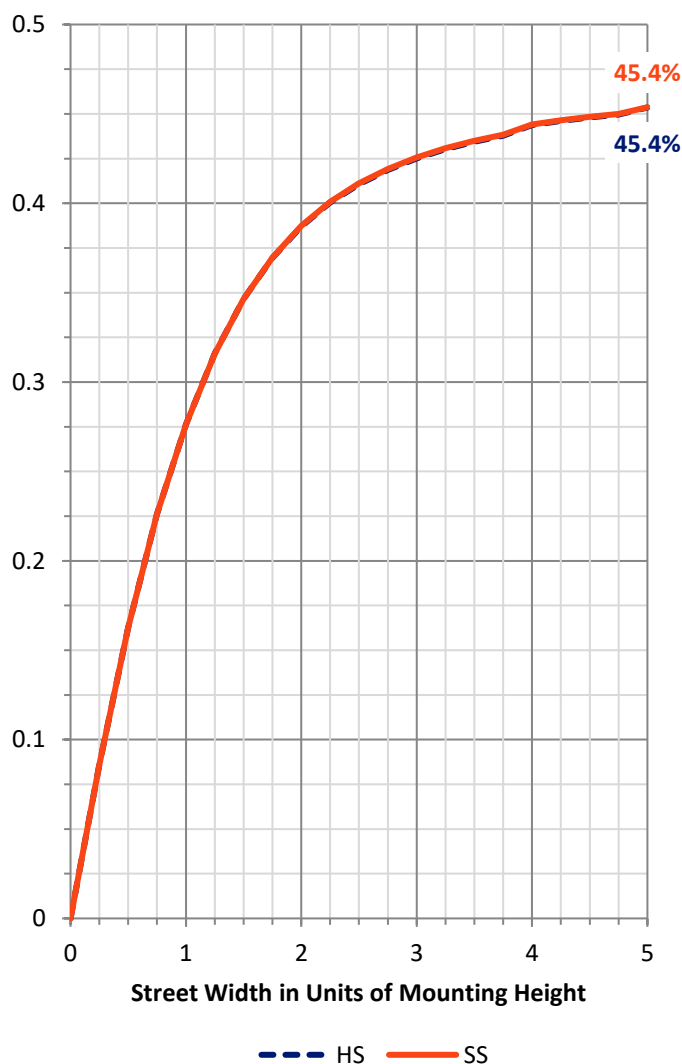
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1670.7	150.2	1821.0
	% Fixture	45.9	4.1	50.0
<b>Street Side</b>	Lumens	1670.7	150.2	1821.0
	% Fixture	45.9	4.1	50.0
<b>Total</b>	Lumens	3341.4	300.5	3641.9
	% Fixture	91.7	8.3	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.8	1.8
10°-20°	188.9	5.2
20°-30°	305.3	8.4
30°-40°	413.1	11.3
40°-50°	517.4	14.2
50°-60°	634.1	17.4
60°-70°	635.6	17.5
70°-80°	458.7	12.6
80°-90°	122.7	3.4
90°-100°	6.7	0.2
100°-110°	68.2	1.9
110°-120°	99.6	2.7
120°-130°	57.8	1.6
130°-140°	30.6	0.8
140°-150°	18.2	0.5
150°-160°	11.2	0.3
160°-170°	6.1	0.2
170°-180°	2.0	0.1
0°-90°	3341.4	91.7
0°-180°	3641.9	100.0

**Coefficient of Utilization**

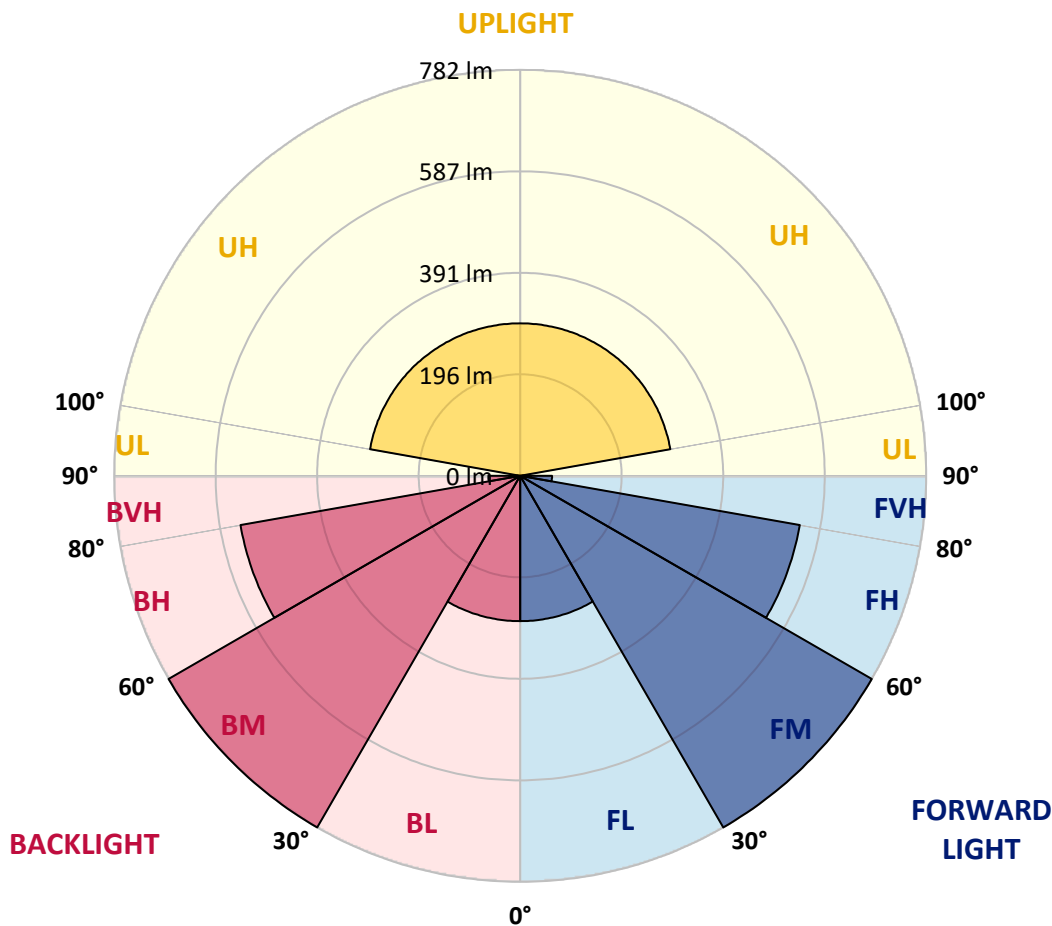


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	280.0	7.7			
FM (30°-60°)	782.3	21.5			
FH (60°-80°)	547.1	15.0			G0/660
FVH (80°-90°)	61.4	1.7			G1/100
BL (0°-30°)	280.0	7.7	B1/500		
BM (30°-60°)	782.3	21.5	B1/1000		
BH (60°-80°)	547.1	15.0	B2/1000		G0/660
BVH (80°-90°)	61.4	1.7			G1/100
UL (90°-100°)	6.7	0.2		U1/10	
UH (100°-180°)	293.8	8.1		U3/500	

**BUG Rating: B2-U3-G1**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9	702.9
2.5°	700.3	700.3	700.3	697.7	700.3	700.3	700.3	700.3	700.3	700.3	700.3
5°	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1	695.1
7.5°	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2	687.2
10°	676.7	676.7	676.7	676.7	679.3	679.3	679.3	679.3	676.7	676.7	676.7
12.5°	668.8	668.8	668.8	671.4	671.4	671.4	671.4	671.4	671.4	671.4	668.8
15°	666.2	666.2	666.2	666.2	668.8	668.8	668.8	668.8	666.2	666.2	666.2
17.5°	661.0	661.0	661.0	663.6	663.6	663.6	663.6	663.6	661.0	661.0	661.0
20°	655.7	655.7	658.3	658.3	661.0	661.0	661.0	658.3	658.3	655.7	658.3
22.5°	655.7	655.7	655.7	658.3	658.3	658.3	658.3	655.7	655.7	655.7	655.7
25°	655.7	655.7	658.3	661.0	661.0	663.6	661.0	658.3	655.7	655.7	655.7
27.5°	658.3	658.3	661.0	663.6	663.6	666.2	663.6	661.0	658.3	658.3	658.3
30°	658.3	658.3	661.0	663.6	663.6	666.2	663.6	661.0	658.3	658.3	658.3
32.5°	653.1	655.7	658.3	661.0	663.6	663.6	663.6	661.0	658.3	655.7	655.7
35°	650.5	653.1	655.7	658.3	661.0	661.0	661.0	658.3	655.7	653.1	653.1
37.5°	647.8	647.8	653.1	655.7	658.3	663.6	661.0	655.7	653.1	650.5	650.5
40°	645.2	647.8	650.5	655.7	658.3	663.6	661.0	655.7	650.5	647.8	647.8
42.5°	645.2	645.2	650.5	655.7	661.0	666.2	663.6	658.3	650.5	647.8	645.2
45°	647.8	650.5	658.3	668.8	674.1	679.3	676.7	668.8	655.7	650.5	647.8
47.5°	658.3	661.0	668.8	679.3	692.4	700.3	692.4	679.3	668.8	661.0	658.3
50°	663.6	666.2	679.3	692.4	710.8	713.4	710.8	692.4	679.3	666.2	666.2
52.5°	674.1	674.1	689.8	713.4	729.1	734.4	729.1	716.0	689.8	676.7	674.1
55°	676.7	676.7	695.1	723.9	747.5	760.6	747.5	726.5	697.7	679.3	679.3
57.5°	661.0	666.2	689.8	718.7	747.5	755.4	747.5	721.3	692.4	668.8	666.2
60°	642.6	650.5	671.4	705.5	726.5	734.4	729.1	705.5	674.1	650.5	647.8
62.5°	624.2	634.7	658.3	684.6	716.0	723.9	716.0	684.6	658.3	634.7	624.2
65°	584.9	595.4	629.5	661.0	689.8	695.1	692.4	661.0	629.5	595.4	590.1
67.5°	545.6	553.4	577.0	626.9	650.5	658.3	653.1	624.2	579.6	553.4	550.8
70°	503.6	511.5	532.4	579.6	603.3	616.4	605.9	579.6	532.4	511.5	508.8
72.5°	448.5	459.0	482.6	524.6	548.2	561.3	550.8	524.6	482.6	456.4	451.1
75°	382.9	390.8	419.7	453.8	477.4	487.8	480.0	456.4	419.7	390.8	388.2
77.5°	312.1	320.0	346.2	380.3	393.4	403.9	396.0	377.7	346.2	320.0	317.4
80°	236.1	243.9	267.5	293.8	306.9	317.4	309.5	291.1	267.5	243.9	241.3
82.5°	154.7	162.6	183.6	204.6	217.7	228.2	220.3	202.0	186.2	162.6	160.0
85°	65.6	73.4	91.8	112.8	123.3	133.8	125.9	110.2	91.8	76.1	73.4
87.5°	5.2	7.9	7.9	10.5	7.9	13.1	7.9	7.9	7.9	7.9	7.9
90°	2.6	2.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.6	2.6
92.5°	2.6	2.6	2.6	3.6	4.1	3.6	4.1	3.1	3.1	2.6	2.6
95°	3.1	3.1	3.6	4.6	5.7	6.2	6.2	3.6	3.6	3.1	3.1
97.5°	4.1	4.6	4.6	5.7	9.3	17.0	10.3	5.1	5.1	4.6	4.1
100°	6.7	7.2	7.2	12.9	27.2	36.5	26.2	13.4	9.8	7.2	7.2
102.5°	21.6	22.6	27.8	41.6	61.7	56.0	47.3	44.7	30.8	24.7	23.6
105°	55.0	54.5	58.6	69.4	86.4	84.8	78.1	70.9	61.2	56.5	56.5
107.5°	72.5	72.5	76.1	85.3	98.2	114.6	116.2	92.0	80.7	75.6	75.0
110°	81.7	81.7	84.8	92.5	109.5	132.6	131.6	113.6	99.7	93.0	92.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.8	84.3	88.4	100.2	118.7	129.0	124.4	117.2	111.0	105.9	104.9
115°	86.9	86.9	91.5	102.8	113.1	117.2	112.1	106.4	102.3	100.2	101.3
117.5°	85.8	87.4	88.4	94.6	101.3	104.4	101.8	94.1	91.0	90.0	88.4
120°	79.7	79.7	80.7	83.8	87.4	88.9	87.9	82.8	80.2	79.7	78.6
122.5°	70.9	71.5	70.9	72.5	75.0	76.6	75.6	71.5	70.4	70.4	69.4
125°	62.2	62.2	61.7	62.7	64.3	63.7	64.3	62.2	61.7	61.7	61.2
127.5°	56.0	55.5	54.5	55.0	55.5	55.5	56.0	54.0	54.5	55.0	54.5
130°	49.9	49.9	48.8	48.8	48.8	47.8	48.8	47.8	48.3	48.8	49.3
132.5°	44.2	44.2	42.7	42.2	42.2	42.2	42.7	42.2	43.2	44.2	44.2
135°	39.6	39.6	38.0	38.6	38.6	38.0	38.6	38.0	39.1	39.6	39.6
137.5°	36.0	36.0	35.0	35.0	35.0	34.4	35.0	35.0	35.5	36.5	37.0
140°	32.9	32.9	32.4	32.4	31.9	32.4	32.4	32.4	32.9	33.4	33.4
142.5°	31.4	30.8	30.3	29.8	30.3	30.3	30.3	29.8	30.3	31.4	31.4
145°	28.8	28.8	28.3	28.3	28.3	28.8	28.3	28.3	28.8	28.8	29.3
147.5°	27.2	27.2	26.7	27.2	27.2	27.2	27.2	26.7	27.2	27.2	27.8
150°	26.7	26.2	25.7	26.2	26.2	25.7	25.7	25.7	25.7	26.2	26.2
152.5°	25.2	25.2	24.7	25.2	24.7	24.7	24.7	24.7	24.7	25.2	25.7
155°	24.2	24.2	23.6	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
157.5°	23.1	23.6	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.6	23.6
160°	22.6	22.6	22.6	22.6	22.1	22.1	22.1	22.6	22.6	22.6	23.1
162.5°	22.1	22.1	22.1	22.1	21.6	21.6	21.6	21.6	22.1	22.1	22.6
165°	22.1	21.6	21.6	21.6	21.1	21.1	21.1	21.1	21.6	22.1	21.6
167.5°	21.1	21.1	21.1	21.1	21.1	20.6	20.6	21.1	21.1	21.1	21.6
170°	21.1	21.1	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	21.1
172.5°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	20.6	20.6	21.1	21.1
175°	21.1	21.1	21.1	21.1	20.6	20.6	20.6	21.1	21.1	21.1	20.6
177.5°	21.1	21.1	21.1	21.1	20.6	21.1	21.1	21.1	21.1	21.1	21.1
180°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1

(END OF REPORT)