

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: P833335

Luminaire Tested: **TTN-D1-830-U-WQ-SG-UPL1**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833335  
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-UPL1  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

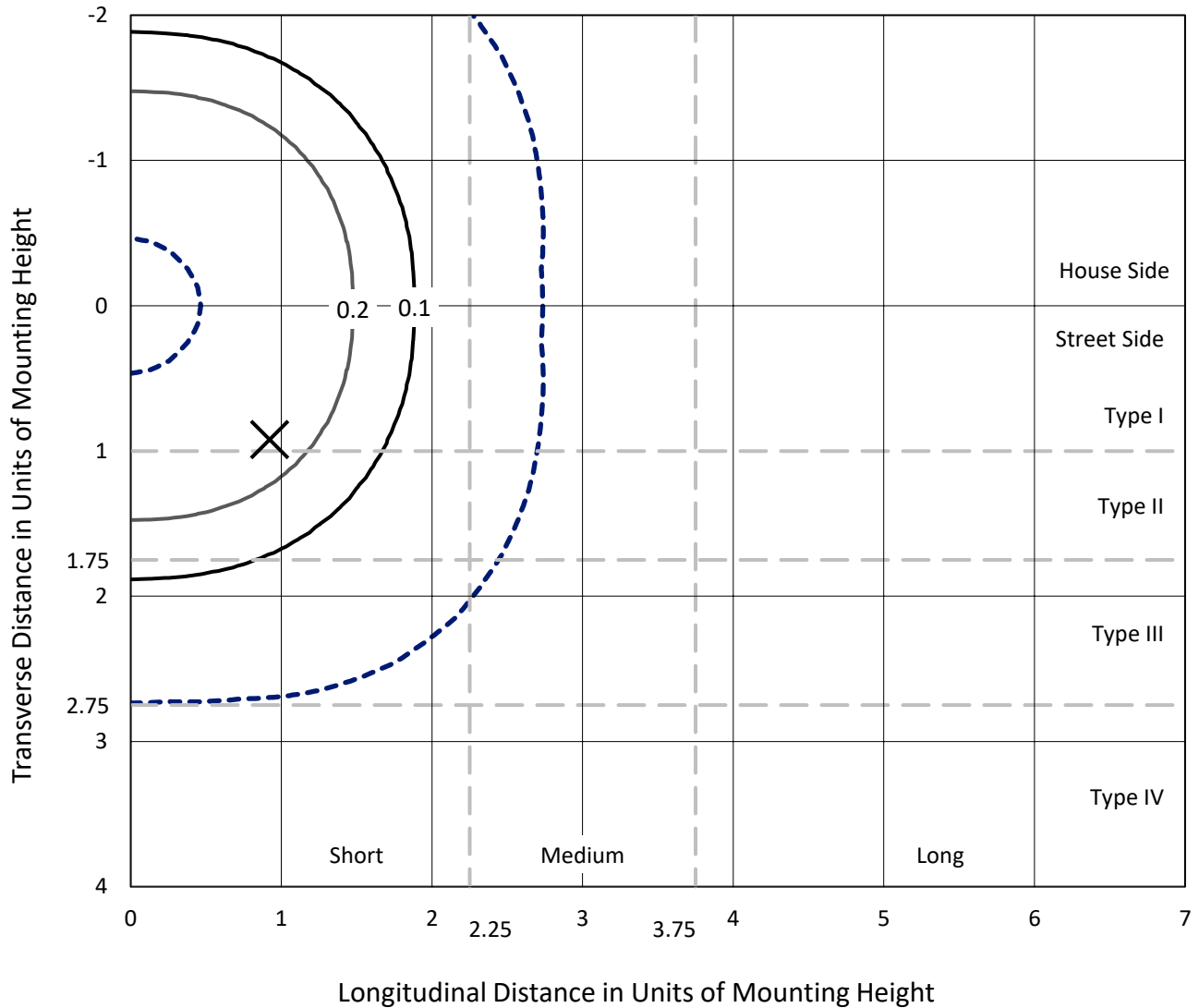
Lumens per Lamp: N/A  
Luminaire Lumens: 3098.9 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U3 - G1  
  
Input Watts (W): 29  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

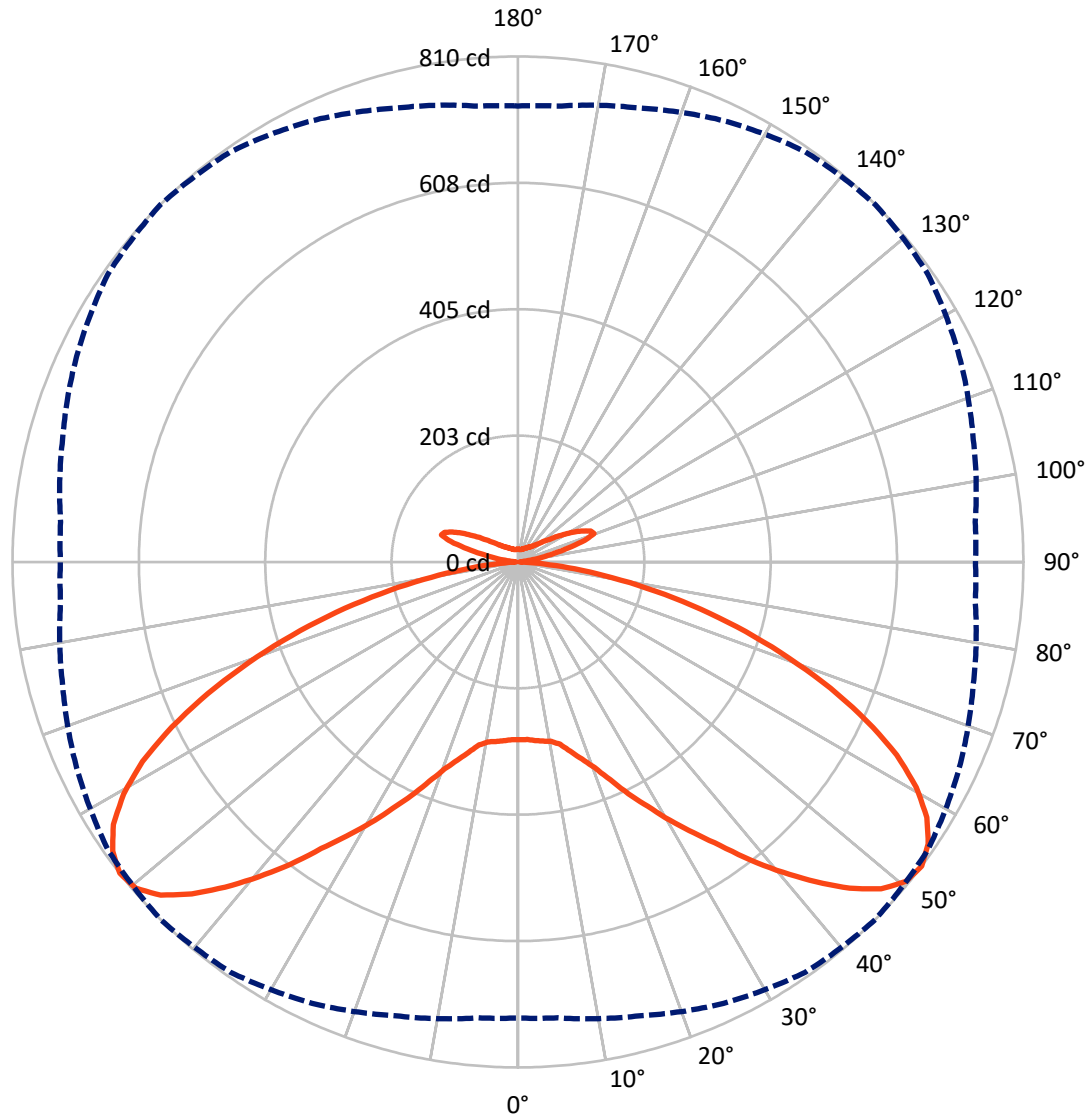
× Max cd  
 - - - 1/2 Max cd



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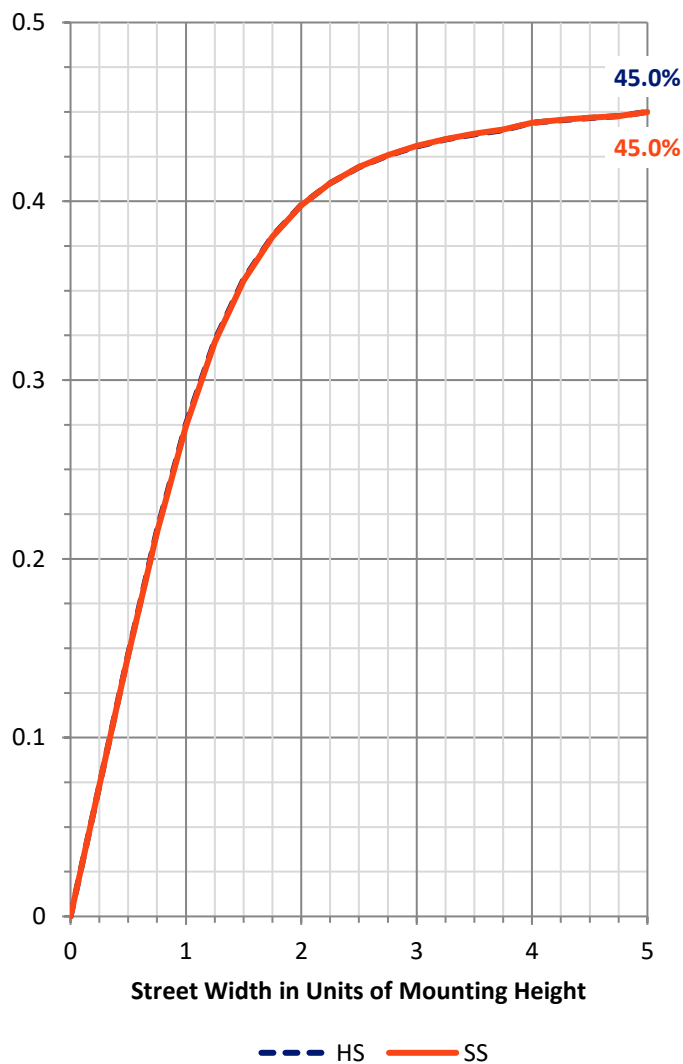
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1401.7	147.7	1549.4
	% Fixture	45.2	4.8	50.0
<b>Street Side</b>	Lumens	1401.7	147.7	1549.4
	% Fixture	45.2	4.8	50.0
<b>Total</b>	Lumens	2803.4	295.5	3098.9
	% Fixture	90.5	9.5	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.5	0.9
10°-20°	90.5	2.9
20°-30°	190.9	6.2
30°-40°	348.7	11.3
40°-50°	555.2	17.9
50°-60°	671.3	21.7
60°-70°	564.4	18.2
70°-80°	299.2	9.7
80°-90°	55.7	1.8
90°-100°	6.6	0.2
100°-110°	67.0	2.2
110°-120°	98.0	3.2
120°-130°	56.9	1.8
130°-140°	30.1	1.0
140°-150°	17.9	0.6
150°-160°	11.0	0.4
160°-170°	6.0	0.2
170°-180°	2.0	0.1
0°-90°	2803.4	90.5
0°-180°	3098.9	100.0

**Coefficient of Utilization**



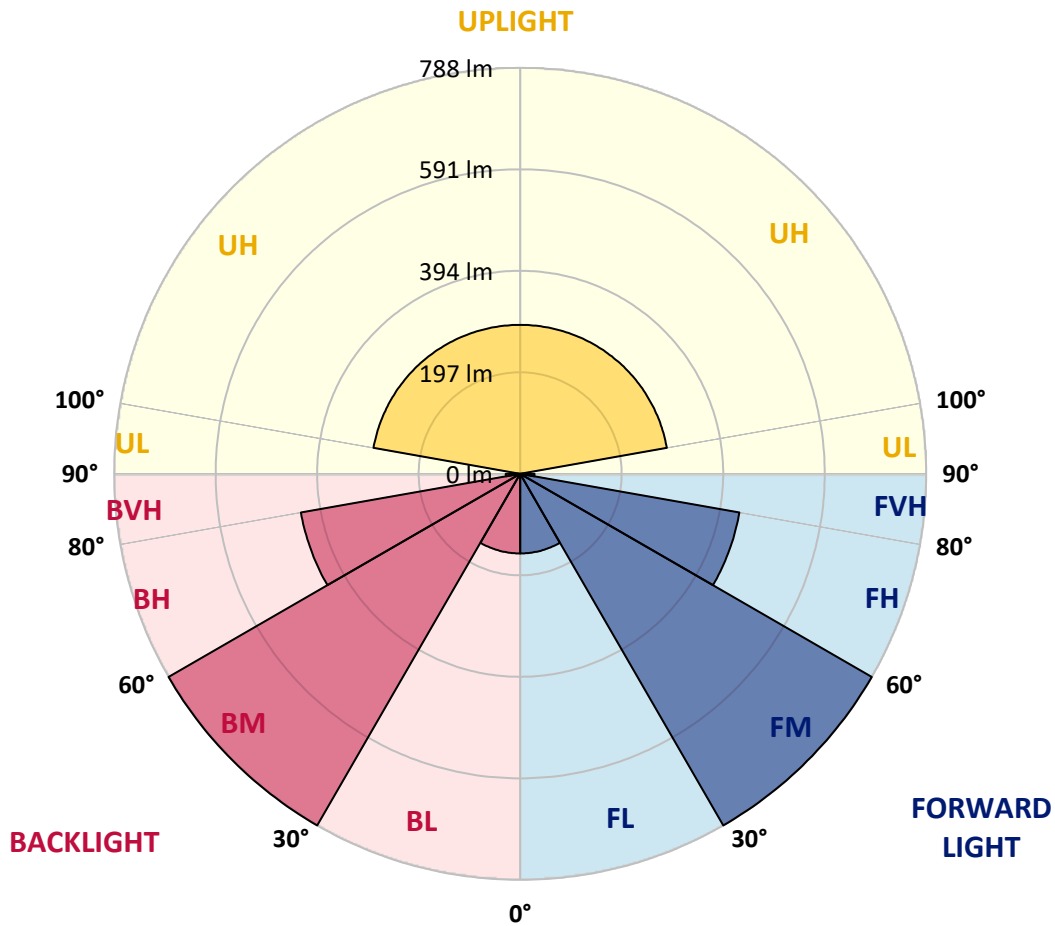
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	154.4	5.0			
FM (30°-60°)	787.6	25.4			
FH (60°-80°)	431.8	13.9			G0/660
FVH (80°-90°)	27.9	0.9			G1/100
BL (0°-30°)	154.4	5.0	B1/500		
BM (30°-60°)	787.6	25.4	B1/1000		
BH (60°-80°)	431.8	13.9	B1/500		G0/660
BVH (80°-90°)	27.9	0.9			G1/100
UL (90°-100°)	6.6	0.2		U1/10	
UH (100°-180°)	288.9	9.3		U3/500	

**BUG Rating: B1-U3-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°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
92.5°	2.5	2.5	2.5	3.5	4.0	3.5	4.0	3.0	3.0	2.5	2.5
95°	3.0	3.0	3.5	4.5	5.6	6.1	6.1	3.5	3.5	3.0	3.0
97.5°	4.0	4.5	4.5	5.6	9.1	16.7	10.1	5.1	5.1	4.5	4.0
100°	6.6	7.1	7.1	12.6	26.8	35.9	25.8	13.1	9.6	7.1	7.1
102.5°	21.2	22.2	27.3	40.9	60.7	55.1	46.5	44.0	30.3	24.3	23.3
105°	54.1	53.6	57.6	68.2	84.9	83.4	76.8	69.8	60.2	55.6	55.6
107.5°	71.3	71.3	74.8	83.9	96.6	112.7	114.2	90.5	79.4	74.3	73.8
110°	80.4	80.4	83.4	91.0	107.7	130.4	129.4	111.7	98.1	91.5	90.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	82.4	82.9	86.9	98.6	116.8	126.9	122.3	115.3	109.2	104.1	103.1
115°	85.4	85.4	90.0	101.1	111.2	115.3	110.2	104.6	100.6	98.6	99.6
117.5°	84.4	85.9	86.9	93.0	99.6	102.6	100.1	92.5	89.5	88.5	86.9
120°	78.4	78.4	79.4	82.4	85.9	87.5	86.4	81.4	78.9	78.4	77.3
122.5°	69.8	70.3	69.8	71.3	73.8	75.3	74.3	70.3	69.3	69.3	68.2
125°	61.2	61.2	60.7	61.7	63.2	62.7	63.2	61.2	60.7	60.7	60.2
127.5°	55.1	54.6	53.6	54.1	54.6	54.6	55.1	53.1	53.6	54.1	53.6
130°	49.0	49.0	48.0	48.0	48.0	47.0	48.0	47.0	47.5	48.0	48.5
132.5°	43.5	43.5	42.0	41.5	41.5	41.5	42.0	41.5	42.5	43.5	43.5
135°	38.9	38.9	37.4	37.9	37.9	37.4	37.9	37.4	38.4	38.9	38.9
137.5°	35.4	35.4	34.4	34.4	34.4	33.9	34.4	34.4	34.9	35.9	36.4
140°	32.4	32.4	31.8	31.8	31.3	31.8	31.8	31.8	32.4	32.9	32.9
142.5°	30.8	30.3	29.8	29.3	29.8	29.8	29.8	29.3	29.8	30.8	30.8
145°	28.3	28.3	27.8	27.8	27.8	28.3	27.8	27.8	28.3	28.3	28.8
147.5°	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.3	26.8	26.8	27.3
150°	26.3	25.8	25.3	25.8	25.8	25.3	25.3	25.3	25.3	25.8	25.8
152.5°	24.8	24.8	24.3	24.8	24.3	24.3	24.3	24.3	24.3	24.8	25.3
155°	23.8	23.8	23.3	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
157.5°	22.7	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3	23.3
160°	22.2	22.2	22.2	22.2	21.7	21.7	21.7	22.2	22.2	22.2	22.7
162.5°	21.7	21.7	21.7	21.7	21.2	21.2	21.2	21.2	21.7	21.7	22.2
165°	21.7	21.2	21.2	21.2	20.7	20.7	20.7	20.7	21.2	21.7	21.2
167.5°	20.7	20.7	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7	21.2
170°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.7
172.5°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.7	20.7
175°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.7	20.7	20.7	20.2
177.5°	20.7	20.7	20.7	20.7	20.2	20.7	20.7	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7

(END OF REPORT)