

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: P833185

Luminaire Tested: **TTN-D1-735-U-WQ-SG-UPL1**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P833185  
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-WQ-SG-UPL1  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

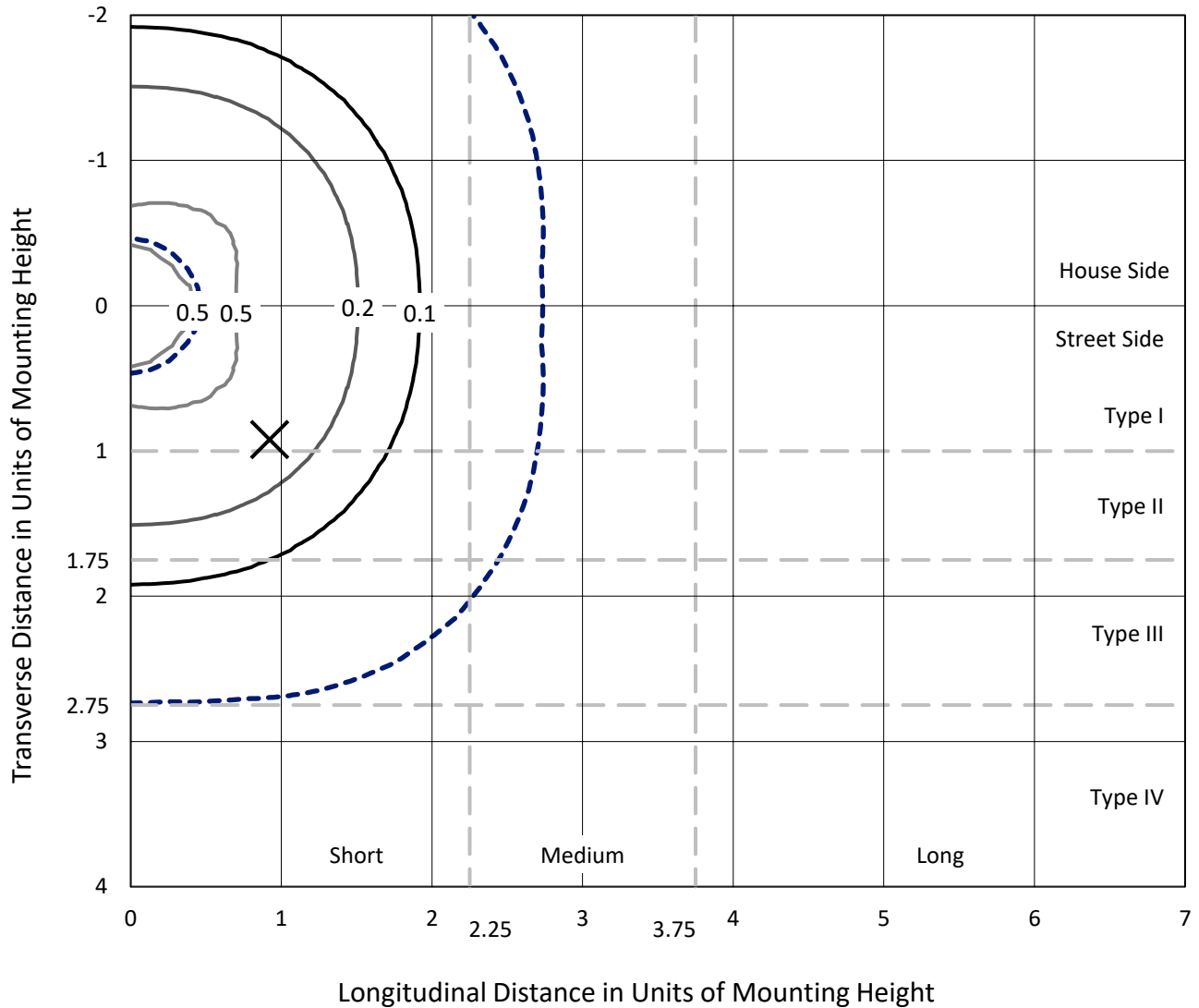
Lumens per Lamp: N/A  
Luminaire Lumens: 3266.9 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U3 - G1  
  
Input Watts (W): 29  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P833185  
 CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

### Iso-Footcandle Lines of Horizontal Illumination

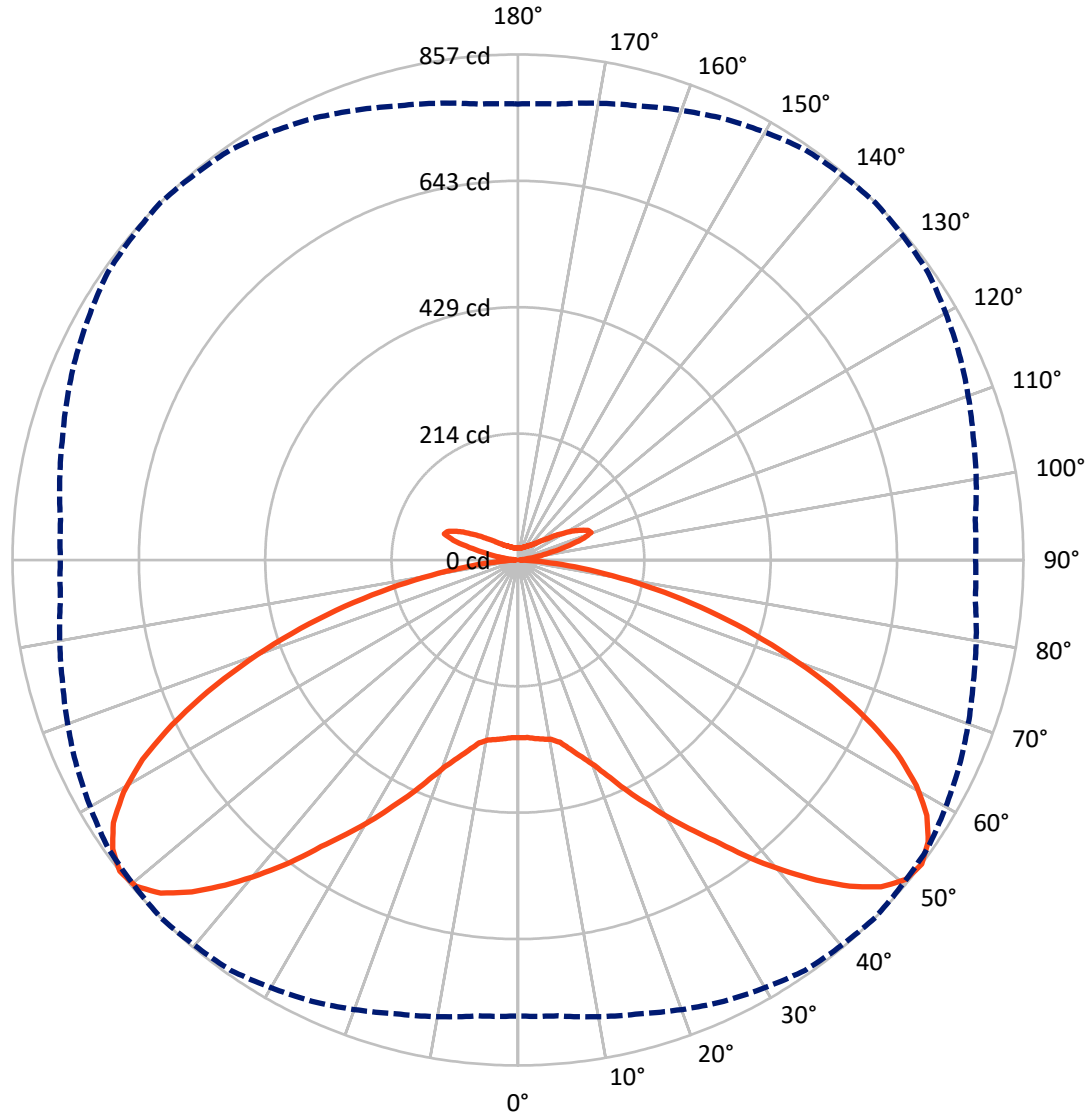
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc  
 Type V - Short - N/A

REPORT NUMBER: P833185  
CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 52.5-Deg Vertical

REPORT NUMBER: P833185  
 CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

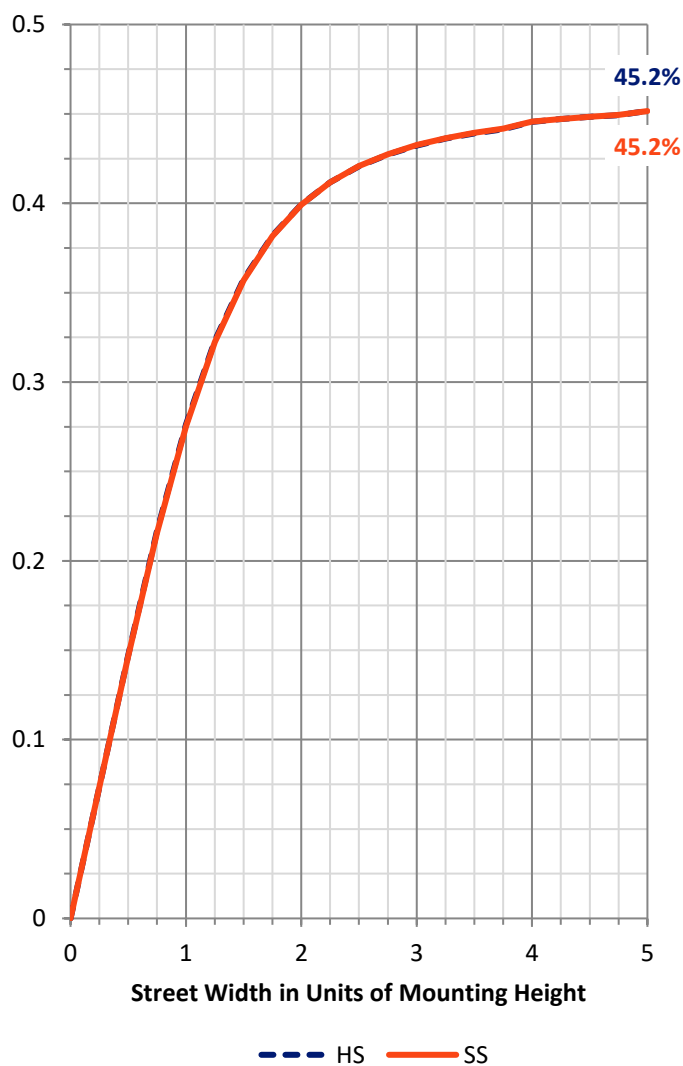
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1483.2	150.2	1633.5
	% Fixture	45.4	4.6	50.0
<b>Street Side</b>	Lumens	1483.2	150.2	1633.5
	% Fixture	45.4	4.6	50.0
<b>Total</b>	Lumens	2966.4	300.5	3266.9
	% Fixture	90.8	9.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	0.9
10°-20°	95.7	2.9
20°-30°	202.0	6.2
30°-40°	369.0	11.3
40°-50°	587.4	18.0
50°-60°	710.3	21.7
60°-70°	597.3	18.3
70°-80°	316.6	9.7
80°-90°	59.0	1.8
90°-100°	6.7	0.2
100°-110°	68.2	2.1
110°-120°	99.6	3.1
120°-130°	57.8	1.8
130°-140°	30.6	0.9
140°-150°	18.2	0.6
150°-160°	11.2	0.3
160°-170°	6.1	0.2
170°-180°	2.0	0.1
0°-90°	2966.4	90.8
0°-180°	3266.9	100.0

**Coefficient of Utilization**

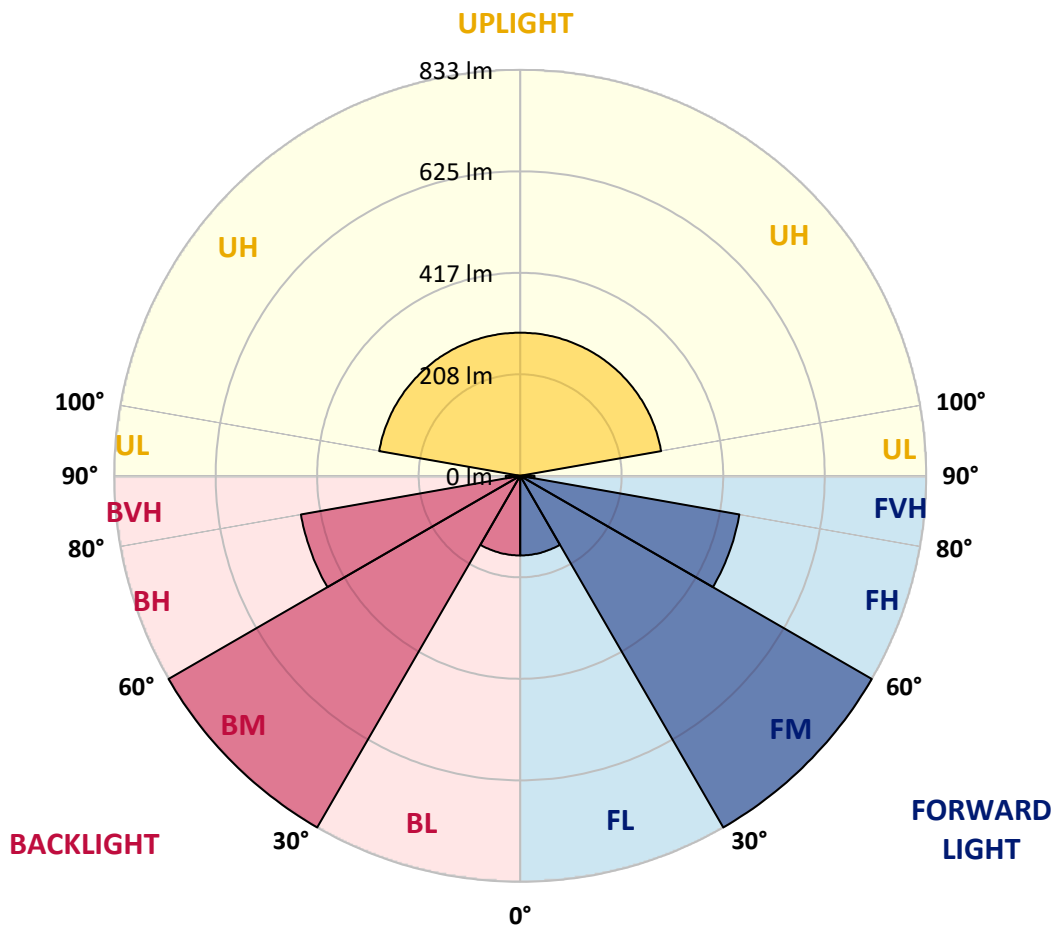


REPORT NUMBER: P833185  
 CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	163.4	5.0			
FM (30°-60°)	833.4	25.5			
FH (60°-80°)	456.9	14.0			G0/660
FVH (80°-90°)	29.5	0.9			G1/100
BL (0°-30°)	163.4	5.0	B1/500		
BM (30°-60°)	833.4	25.5	B1/1000		
BH (60°-80°)	456.9	14.0	B1/500		G0/660
BVH (80°-90°)	29.5	0.9			G1/100
UL (90°-100°)	6.7	0.2		U1/10	
UH (100°-180°)	293.8	9.0		U3/500	

**BUG Rating: B1-U3-G1**  
 Type V Short





REPORT NUMBER: P833185

CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
2.5°	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5	301.5
5°	304.2	304.2	301.5	304.2	304.2	304.2	304.2	304.2	304.2	304.2	304.2
7.5°	304.2	304.2	304.2	306.8	306.8	306.8	306.8	304.2	304.2	304.2	304.2
10°	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4	309.4
12.5°	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3	317.3
15°	330.4	330.4	330.4	330.4	333.0	333.0	333.0	330.4	330.4	330.4	330.4
17.5°	346.1	346.1	348.7	348.7	351.4	351.4	351.4	348.7	346.1	348.7	346.1
20°	369.7	369.7	369.7	372.3	375.0	375.0	375.0	369.7	369.7	369.7	369.7
22.5°	395.9	395.9	395.9	398.6	401.2	401.2	401.2	395.9	395.9	395.9	395.9
25°	427.4	427.4	427.4	430.0	432.7	435.3	435.3	430.0	427.4	427.4	424.8
27.5°	458.9	458.9	464.1	466.7	469.4	469.4	469.4	464.1	461.5	461.5	461.5
30°	495.6	495.6	500.8	503.4	508.7	508.7	508.7	500.8	498.2	495.6	495.6
32.5°	529.7	532.3	537.5	542.8	548.0	548.0	550.6	540.2	534.9	532.3	532.3
35°	566.4	569.0	574.2	582.1	587.4	590.0	592.6	582.1	574.2	571.6	571.6
37.5°	608.3	611.0	618.8	626.7	637.2	642.4	645.0	629.3	616.2	611.0	611.0
40°	655.5	658.2	666.0	676.5	687.0	692.2	694.9	679.1	666.0	660.8	658.2
42.5°	694.9	700.1	708.0	723.7	734.2	742.1	742.1	723.7	708.0	700.1	700.1
45°	731.6	736.8	749.9	765.7	781.4	789.3	786.6	768.3	749.9	739.4	736.8
47.5°	760.4	765.7	781.4	799.8	820.7	828.6	826.0	805.0	781.4	768.3	765.7
50°	776.2	778.8	797.1	823.4	844.3	852.2	846.9	826.0	799.8	781.4	778.8
52.5°	773.5	776.2	797.1	826.0	849.6	857.4	849.6	826.0	799.8	778.8	776.2
55°	757.8	760.4	781.4	812.9	836.5	844.3	836.5	812.9	784.0	763.0	760.4
57.5°	729.0	731.6	752.6	784.0	810.2	818.1	807.6	781.4	752.6	731.6	731.6
60°	687.0	689.6	710.6	744.7	768.3	776.2	763.0	742.1	713.2	689.6	687.0
62.5°	631.9	631.9	655.5	689.6	710.6	721.1	708.0	684.4	658.2	631.9	634.6
65°	566.4	563.8	587.4	618.8	642.4	650.3	637.2	616.2	590.0	566.4	566.4
67.5°	498.2	498.2	516.6	542.8	563.8	571.6	558.5	540.2	519.2	498.2	498.2
70°	424.8	424.8	437.9	464.1	482.5	487.7	479.9	461.5	443.1	424.8	424.8
72.5°	351.4	348.7	361.9	382.8	398.6	403.8	395.9	385.5	364.5	351.4	351.4
75°	277.9	275.3	283.2	301.5	314.7	319.9	312.0	304.2	288.4	277.9	277.9
77.5°	207.1	204.5	212.4	228.1	236.0	238.6	233.4	228.1	215.0	207.1	207.1
80°	141.6	139.0	144.2	154.7	162.6	162.6	160.0	157.3	146.8	141.6	144.2
82.5°	83.9	81.3	86.5	94.4	99.6	97.0	97.0	94.4	86.5	83.9	83.9
85°	36.7	34.1	36.7	42.0	47.2	44.6	44.6	44.6	39.3	36.7	36.7
87.5°	5.2	5.2	5.2	7.9	10.5	7.9	7.9	7.9	5.2	5.2	5.2
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



REPORT NUMBER: P833185  
 CATALOG NUMBER: TTN-D1-735-U-WQ-SG-UPL1

**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)