

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: P833323

Luminaire Tested: **TTN-D1-830-U-MQ-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833323
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-MQ-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3453.9 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

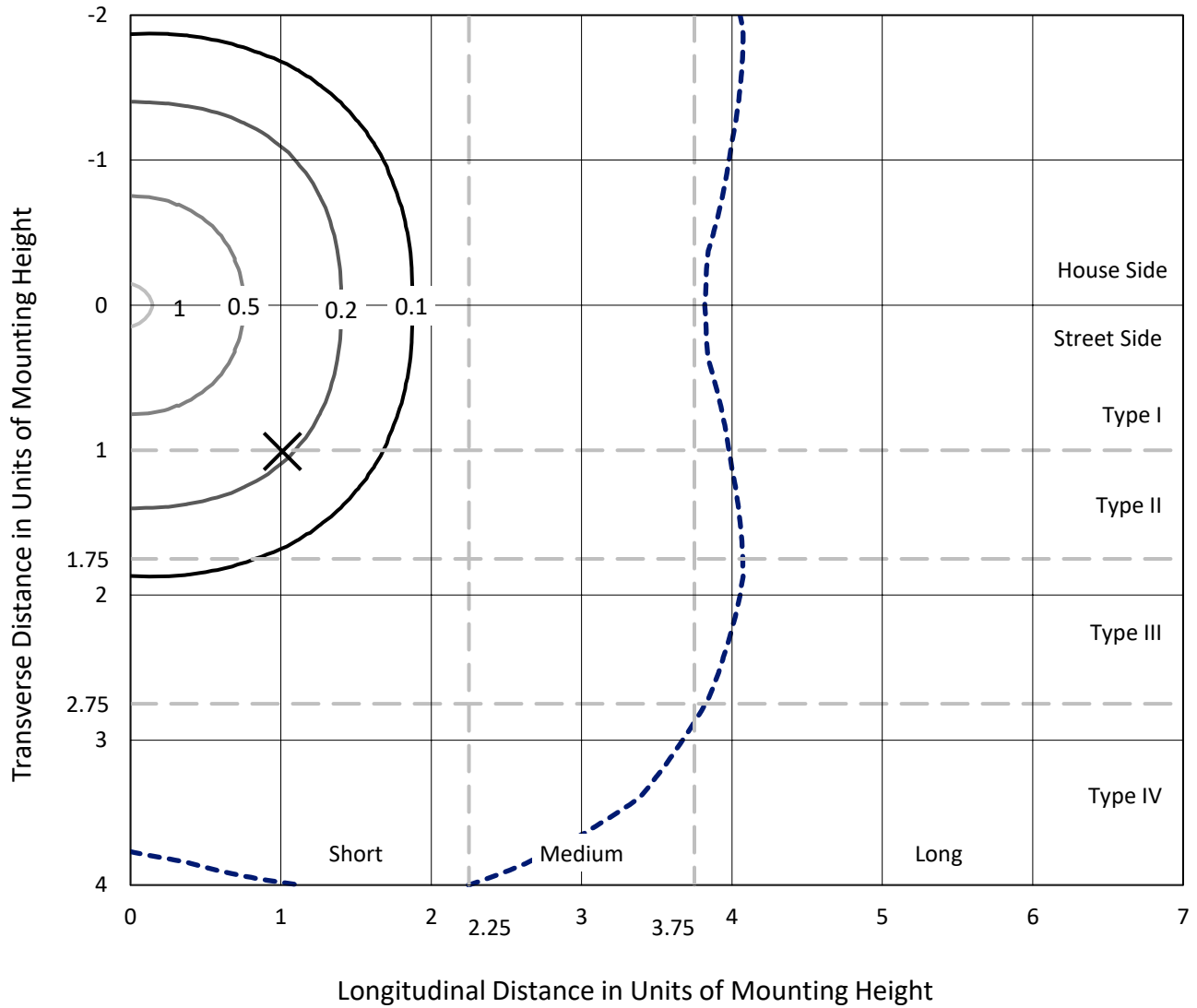
Input Watts (W): 29
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

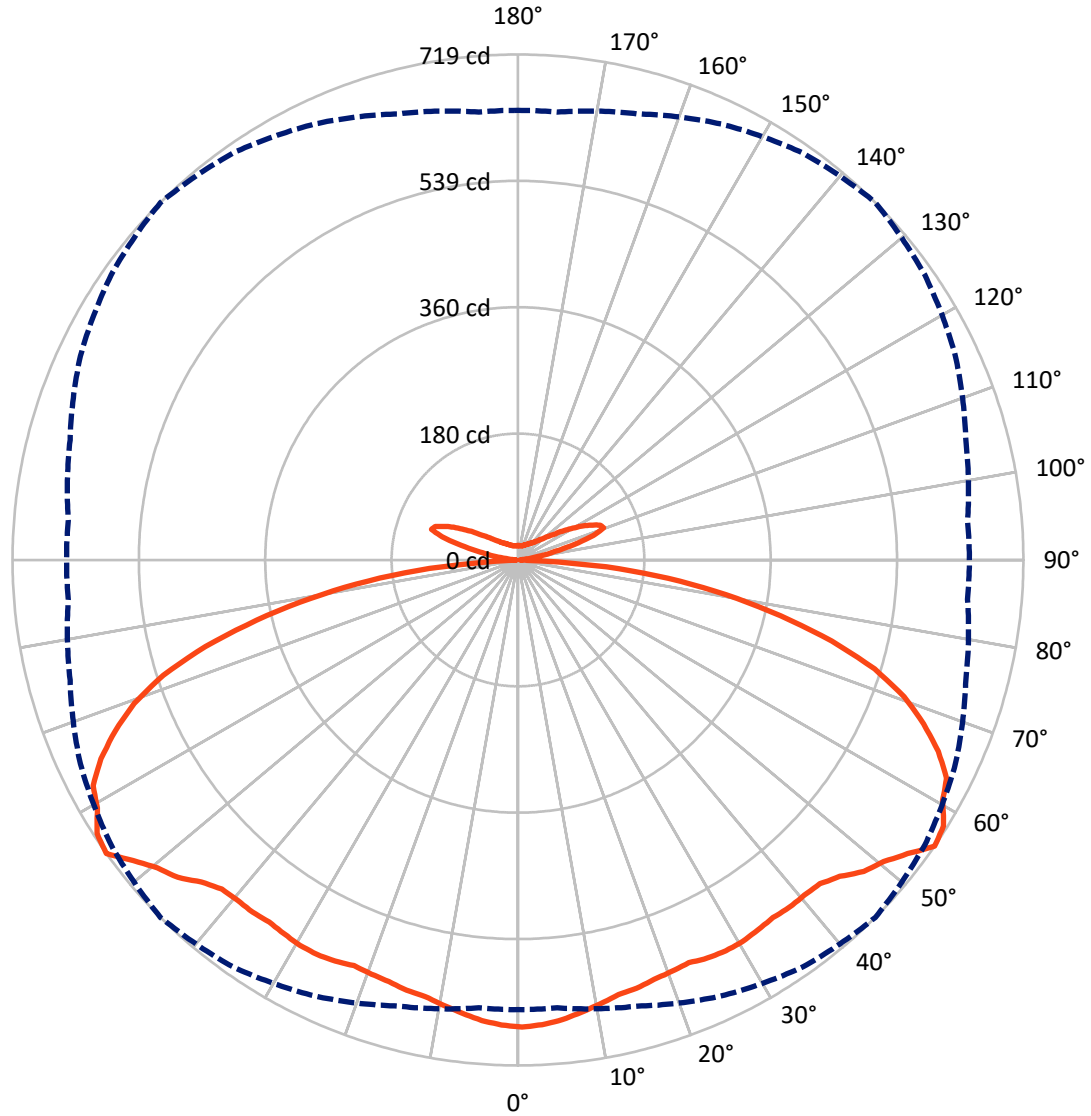
✕ Max cd
 - - - 1/2 Max cd



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



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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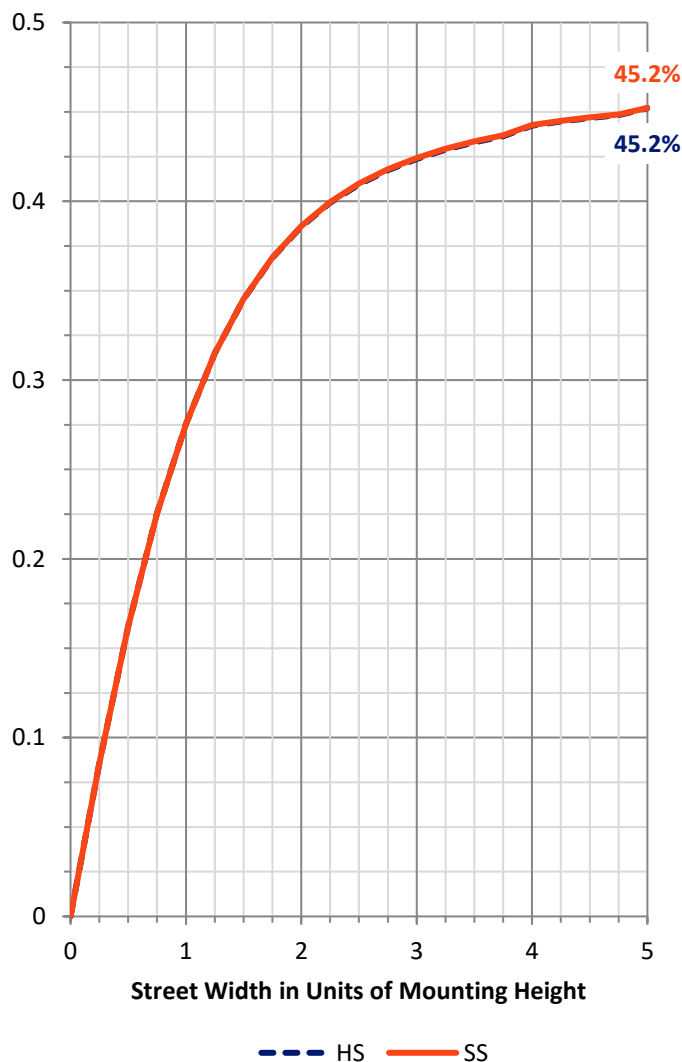
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1579.2	147.7	1726.9
	% Fixture	45.7	4.3	50.0
Street Side	Lumens	1579.2	147.7	1726.9
	% Fixture	45.7	4.3	50.0
Total	Lumens	3158.4	295.5	3453.9
	% Fixture	91.4	8.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.2	1.8
10°-20°	178.5	5.2
20°-30°	288.6	8.4
30°-40°	390.5	11.3
40°-50°	489.1	14.2
50°-60°	599.3	17.4
60°-70°	600.8	17.4
70°-80°	433.5	12.6
80°-90°	116.0	3.4
90°-100°	6.6	0.2
100°-110°	67.0	1.9
110°-120°	98.0	2.8
120°-130°	56.9	1.6
130°-140°	30.1	0.9
140°-150°	17.9	0.5
150°-160°	11.0	0.3
160°-170°	6.0	0.2
170°-180°	2.0	0.1
0°-90°	3158.4	91.4
0°-180°	3453.9	100.0

Coefficient of Utilization



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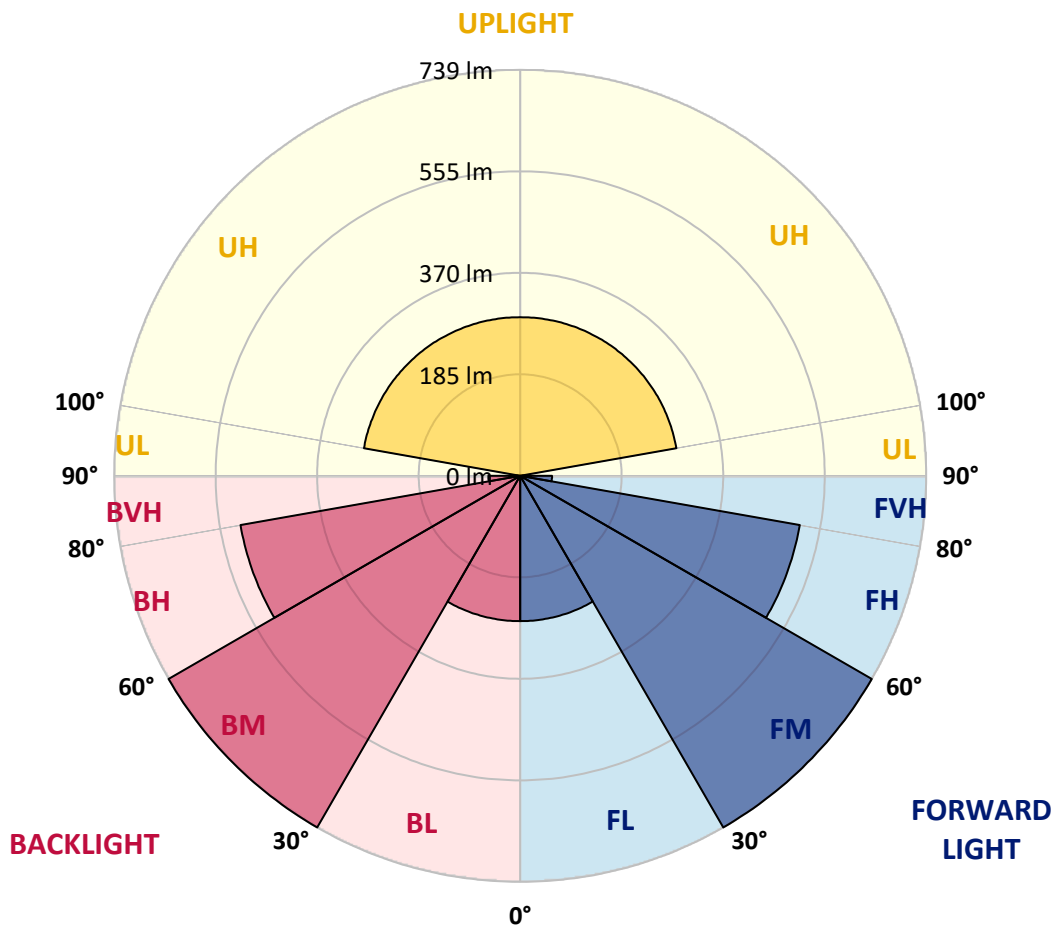
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	264.6	7.7			
FM (30°-60°)	739.4	21.4			
FH (60°-80°)	517.2	15.0			G0/660
FVH (80°-90°)	58.0	1.7			G1/100
BL (0°-30°)	264.6	7.7	B1/500		
BM (30°-60°)	739.4	21.4	B1/1000		
BH (60°-80°)	517.2	15.0	B2/1000		G0/660
BVH (80°-90°)	58.0	1.7			G1/100
UL (90°-100°)	6.6	0.2		U1/10	
UH (100°-180°)	288.9	8.4		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°	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4	664.4
2.5°	661.9	661.9	661.9	659.5	661.9	661.9	661.9	661.9	661.9	661.9	661.9
5°	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0	657.0
7.5°	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5	649.5
10°	639.6	639.6	639.6	639.6	642.1	642.1	642.1	642.1	639.6	639.6	639.6
12.5°	632.2	632.2	632.2	634.7	634.7	634.7	634.7	634.7	634.7	634.7	632.2
15°	629.7	629.7	629.7	629.7	632.2	632.2	632.2	632.2	629.7	629.7	629.7
17.5°	624.8	624.8	624.8	627.2	627.2	627.2	627.2	627.2	624.8	624.8	624.8
20°	619.8	619.8	622.3	622.3	624.8	624.8	624.8	622.3	622.3	619.8	622.3
22.5°	619.8	619.8	619.8	622.3	622.3	622.3	622.3	619.8	619.8	619.8	619.8
25°	619.8	619.8	622.3	624.8	624.8	627.2	624.8	622.3	619.8	619.8	619.8
27.5°	622.3	622.3	624.8	627.2	627.2	629.7	627.2	624.8	622.3	622.3	622.3
30°	622.3	622.3	624.8	627.2	627.2	629.7	627.2	624.8	622.3	622.3	622.3
32.5°	617.3	619.8	622.3	624.8	627.2	627.2	627.2	624.8	622.3	619.8	619.8
35°	614.8	617.3	619.8	622.3	624.8	624.8	624.8	622.3	619.8	617.3	617.3
37.5°	612.4	612.4	617.3	619.8	622.3	627.2	624.8	619.8	617.3	614.8	614.8
40°	609.9	612.4	614.8	619.8	622.3	627.2	624.8	619.8	614.8	612.4	612.4
42.5°	609.9	609.9	614.8	619.8	624.8	629.7	627.2	622.3	614.8	612.4	609.9
45°	612.4	614.8	622.3	632.2	637.1	642.1	639.6	632.2	619.8	614.8	612.4
47.5°	622.3	624.8	632.2	642.1	654.5	661.9	654.5	642.1	632.2	624.8	622.3
50°	627.2	629.7	642.1	654.5	671.9	674.3	671.9	654.5	642.1	629.7	629.7
52.5°	637.1	637.1	652.0	674.3	689.2	694.2	689.2	676.8	652.0	639.6	637.1
55°	639.6	639.6	657.0	684.3	706.6	719.0	706.6	686.7	659.5	642.1	642.1
57.5°	624.8	629.7	652.0	679.3	706.6	714.0	706.6	681.8	654.5	632.2	629.7
60°	607.4	614.8	634.7	666.9	686.7	694.2	689.2	666.9	637.1	614.8	612.4
62.5°	590.0	600.0	622.3	647.1	676.8	684.3	676.8	647.1	622.3	600.0	590.0
65°	552.9	562.8	595.0	624.8	652.0	657.0	654.5	624.8	595.0	562.8	557.8
67.5°	515.7	523.1	545.4	592.5	614.8	622.3	617.3	590.0	547.9	523.1	520.6
70°	476.0	483.4	503.3	547.9	570.2	582.6	572.7	547.9	503.3	483.4	481.0
72.5°	423.9	433.9	456.2	495.8	518.1	530.5	520.6	495.8	456.2	431.4	426.4
75°	362.0	369.4	396.7	428.9	451.2	461.1	453.7	431.4	396.7	369.4	366.9
77.5°	295.0	302.5	327.3	359.5	371.9	381.8	374.4	357.0	327.3	302.5	300.0
80°	223.1	230.6	252.9	277.7	290.1	300.0	292.5	275.2	252.9	230.6	228.1
82.5°	146.3	153.7	173.5	193.4	205.8	215.7	208.3	190.9	176.0	153.7	151.2
85°	62.0	69.4	86.8	106.6	116.5	126.4	119.0	104.1	86.8	71.9	69.4
87.5°	5.0	7.4	7.4	9.9	7.4	12.4	7.4	7.4	7.4	7.4	7.4
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)