

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: P833188

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833188
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-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3486.9 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

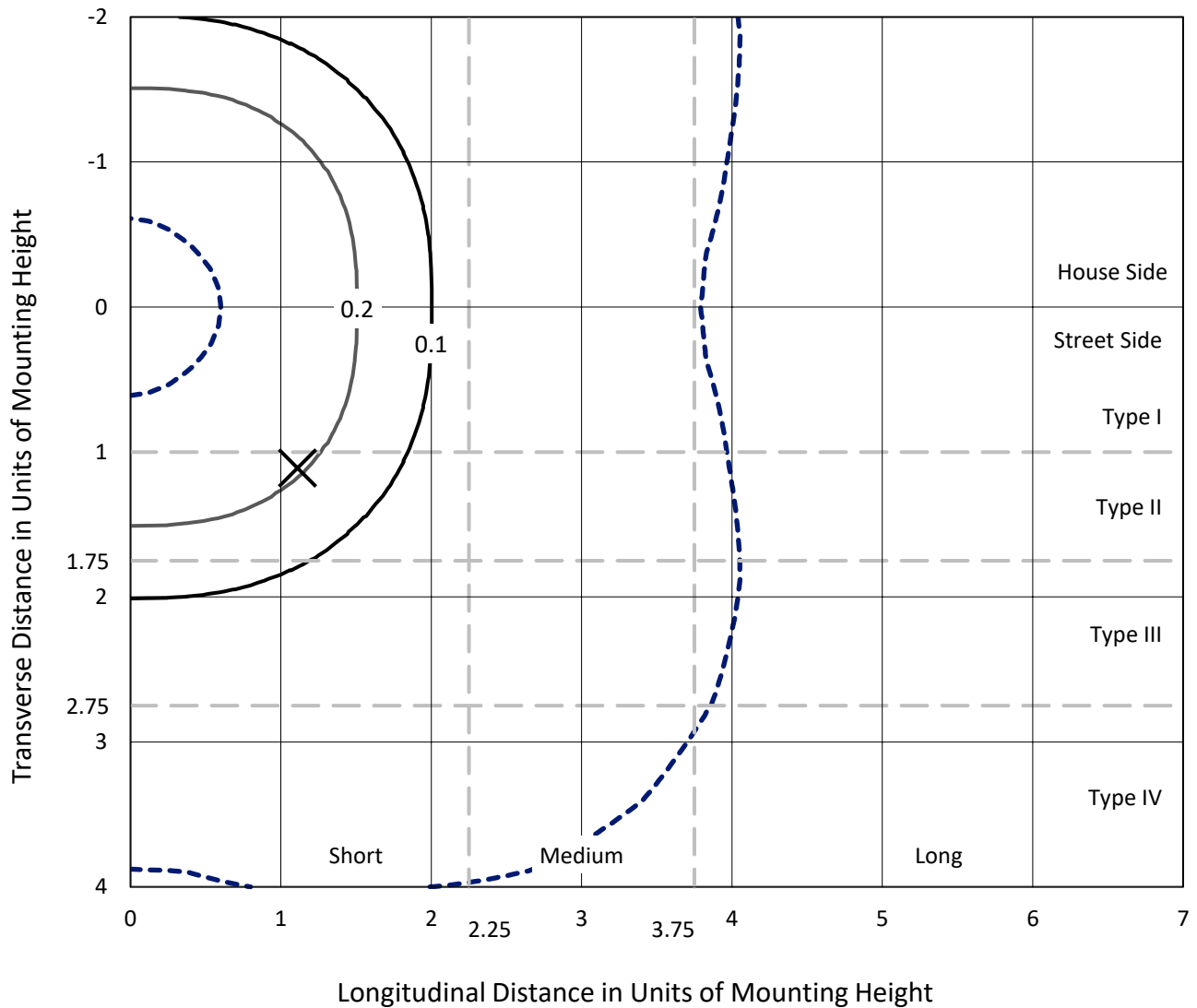
Input Watts (W): 29
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

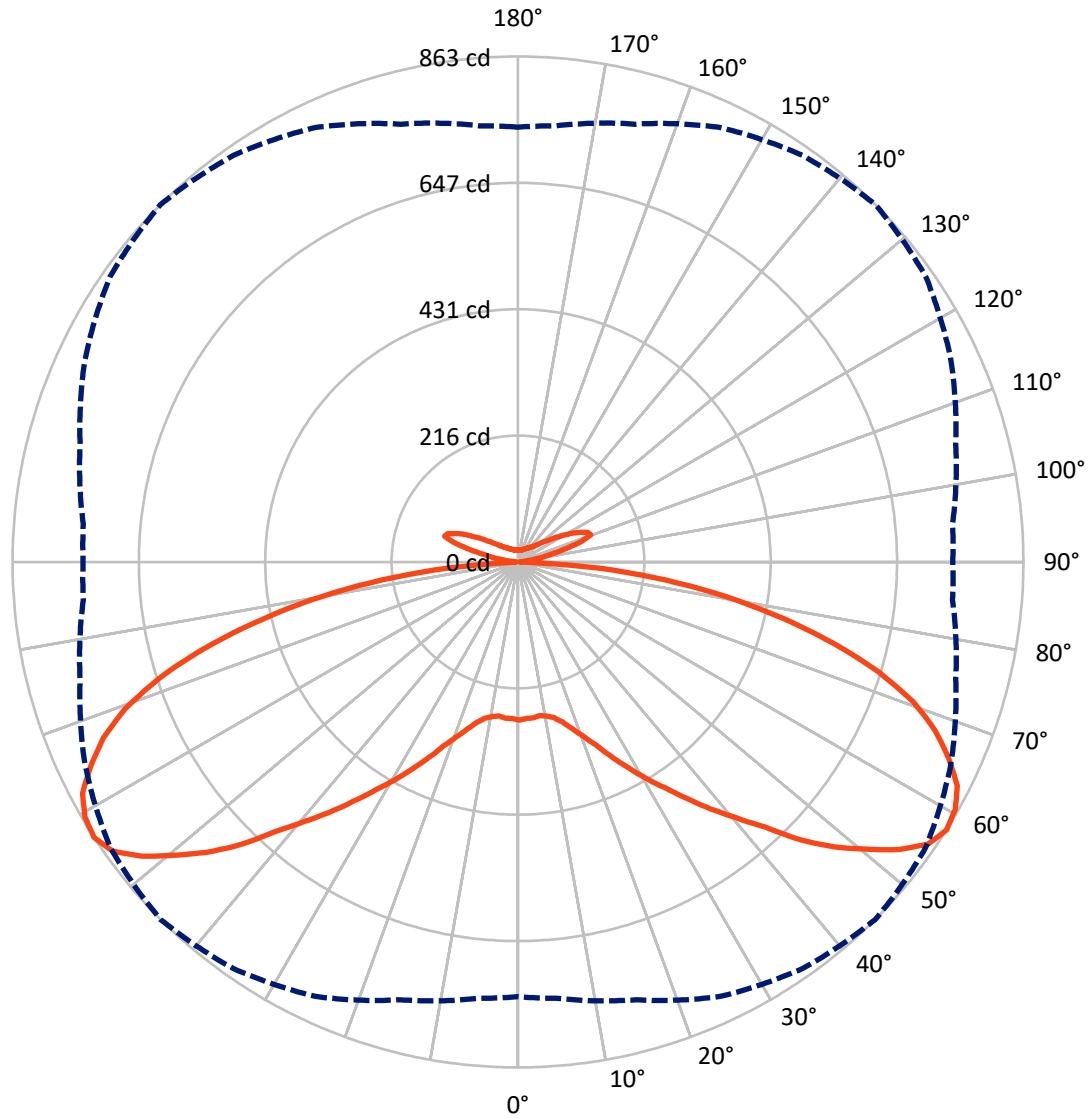
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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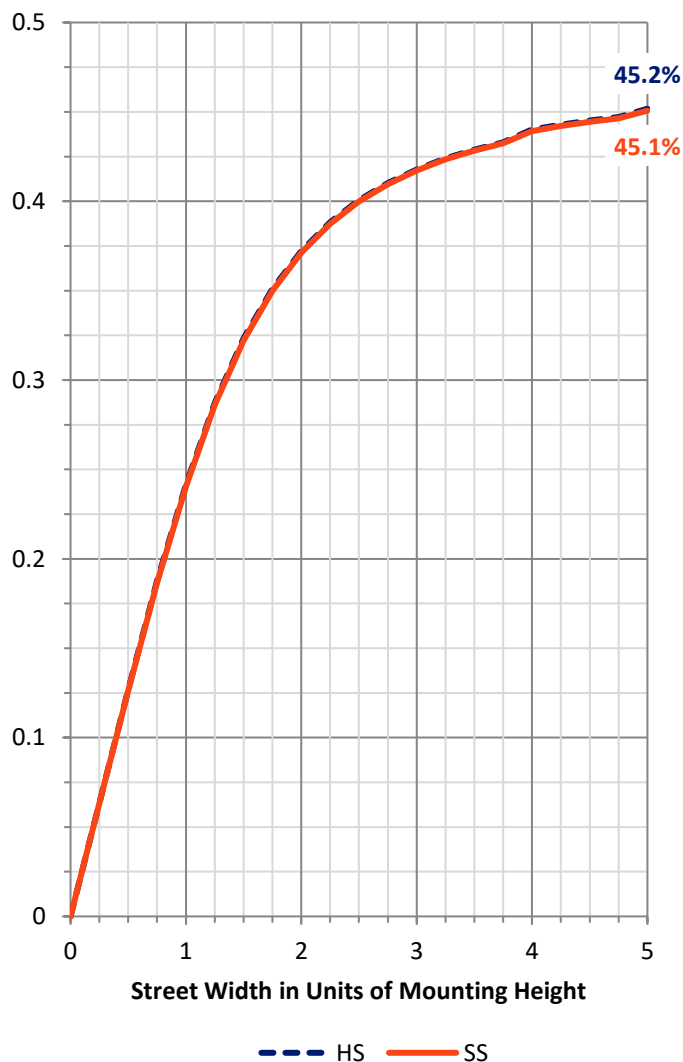
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1593.2	150.2	1743.4
	% Fixture	45.7	4.3	50.0
Street Side	Lumens	1593.2	150.2	1743.4
	% Fixture	45.7	4.3	50.0
Total	Lumens	3186.4	300.5	3486.9
	% Fixture	91.4	8.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	0.7
10°-20°	81.0	2.3
20°-30°	170.0	4.9
30°-40°	308.3	8.8
40°-50°	502.7	14.4
50°-60°	703.6	20.2
60°-70°	734.5	21.1
70°-80°	524.8	15.1
80°-90°	136.2	3.9
90°-100°	6.7	0.2
100°-110°	68.2	2.0
110°-120°	99.6	2.9
120°-130°	57.8	1.7
130°-140°	30.6	0.9
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°	3186.4	91.4
0°-180°	3486.9	100.0

Coefficient of Utilization



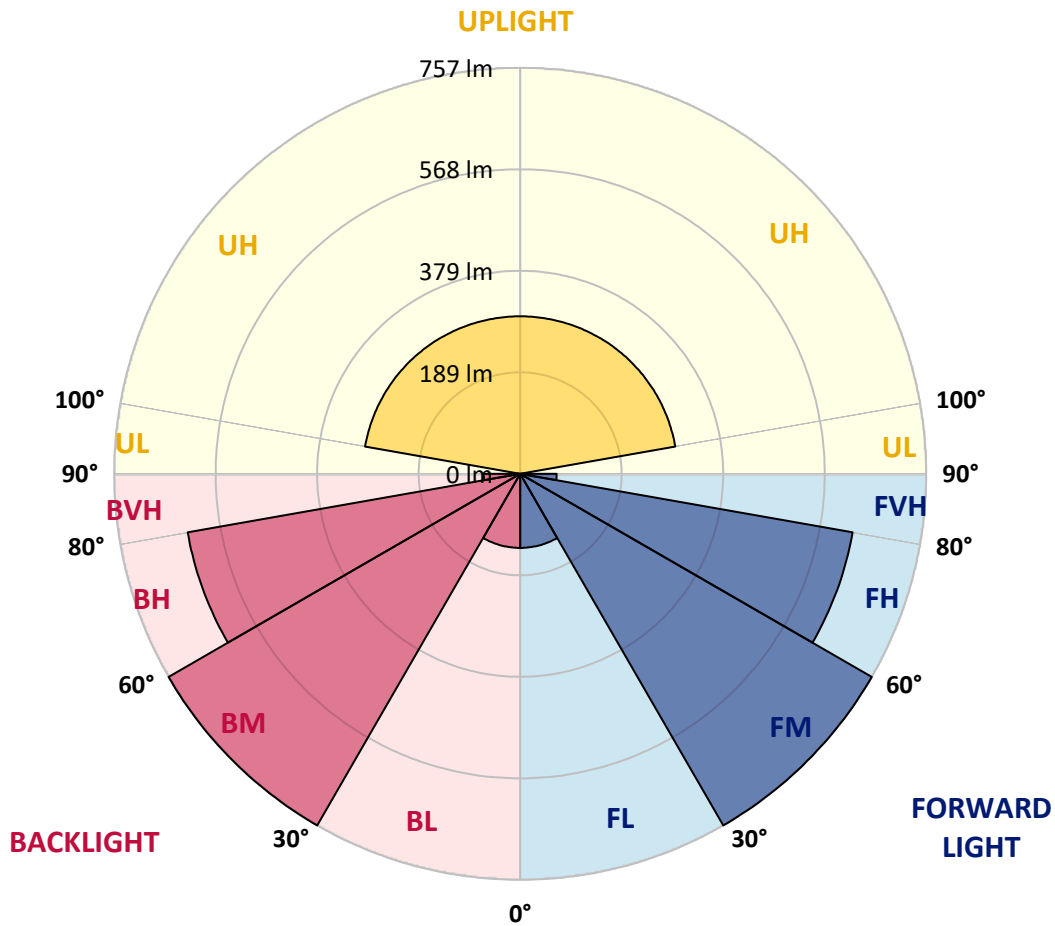
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.2	4.0			
FM (30°-60°)	757.3	21.7			
FH (60°-80°)	629.7	18.1			G0/660
FVH (80°-90°)	68.1	2.0			G1/100
BL (0°-30°)	138.2	4.0	B1/500		
BM (30°-60°)	757.3	21.7	B1/1000		
BH (60°-80°)	629.7	18.1	B2/1000		G0/660
BVH (80°-90°)	68.1	2.0			G1/100
UL (90°-100°)	6.7	0.2		U1/10	
UH (100°-180°)	293.8	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°	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1	270.1
2.5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
5°	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4	267.4
7.5°	262.2	262.2	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8	264.8
10°	262.2	262.2	264.8	264.8	267.4	267.4	267.4	264.8	264.8	262.2	262.2
12.5°	267.4	267.4	267.4	270.1	272.7	272.7	272.7	270.1	270.1	267.4	267.4
15°	275.3	277.9	277.9	280.5	283.2	283.2	283.2	280.5	280.5	277.9	277.9
17.5°	291.0	291.0	291.0	293.7	296.3	298.9	298.9	293.7	293.7	291.0	293.7
20°	306.8	309.4	309.4	312.0	314.6	317.3	314.6	312.0	309.4	309.4	309.4
22.5°	330.4	330.4	333.0	333.0	338.2	338.2	338.2	333.0	333.0	333.0	333.0
25°	356.6	356.6	359.2	361.8	367.1	367.1	364.4	359.2	359.2	359.2	361.8
27.5°	388.0	388.0	390.7	390.7	395.9	395.9	393.3	390.7	390.7	390.7	393.3
30°	416.9	416.9	422.1	424.7	427.4	427.4	427.4	422.1	422.1	419.5	419.5
32.5°	443.1	445.7	448.3	456.2	461.5	458.8	461.5	456.2	451.0	448.3	448.3
35°	471.9	474.6	479.8	487.7	495.5	495.5	495.5	487.7	482.4	477.2	479.8
37.5°	506.0	506.0	513.9	521.8	532.2	534.9	532.2	524.4	516.5	511.3	511.3
40°	542.7	542.7	550.6	558.5	571.6	574.2	571.6	561.1	550.6	548.0	548.0
42.5°	579.4	579.4	589.9	597.8	613.5	618.8	613.5	600.4	589.9	582.1	584.7
45°	618.8	621.4	634.5	650.2	668.6	676.5	668.6	652.9	637.1	621.4	621.4
47.5°	663.3	663.3	679.1	697.4	718.4	726.3	715.8	700.1	679.1	666.0	666.0
50°	692.2	694.8	715.8	739.4	765.6	770.8	763.0	739.4	715.8	697.4	694.8
52.5°	721.0	723.6	747.2	781.3	807.5	815.4	804.9	781.3	747.2	723.6	723.6
55°	739.4	744.6	770.8	807.5	836.4	849.5	833.8	807.5	768.2	742.0	739.4
57.5°	742.0	747.2	773.5	818.0	846.9	862.6	849.5	815.4	773.5	744.6	742.0
60°	736.8	739.4	765.6	812.8	846.9	857.4	846.9	810.2	763.0	739.4	734.1
62.5°	723.6	728.9	755.1	794.4	833.8	841.6	831.1	791.8	752.5	723.6	718.4
65°	681.7	686.9	726.3	765.6	799.7	807.5	799.7	765.6	723.6	681.7	676.5
67.5°	634.5	637.1	676.5	723.6	755.1	768.2	755.1	726.3	673.8	634.5	629.3
70°	584.7	587.3	618.8	668.6	700.1	715.8	702.7	671.2	616.1	582.1	579.4
72.5°	527.0	527.0	558.5	597.8	629.3	645.0	634.5	595.2	553.2	519.1	513.9
75°	448.3	451.0	485.1	513.9	548.0	558.5	548.0	516.5	477.2	443.1	437.9
77.5°	367.1	369.7	398.5	422.1	453.6	461.5	453.6	427.4	390.7	361.8	359.2
80°	277.9	280.5	304.1	325.1	351.3	361.8	354.0	327.7	298.9	272.7	264.8
82.5°	180.9	183.5	207.1	222.9	246.5	254.3	249.1	225.5	201.9	175.7	173.0
85°	81.3	83.9	104.9	118.0	136.3	144.2	139.0	118.0	99.6	76.0	70.8
87.5°	7.9	7.9	7.9	7.9	7.9	10.5	10.5	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)