

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: P833542

Luminaire Tested: **TTN-D2-735-U-WQ-CG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833542
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-D2-735-U-WQ-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5060.9 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

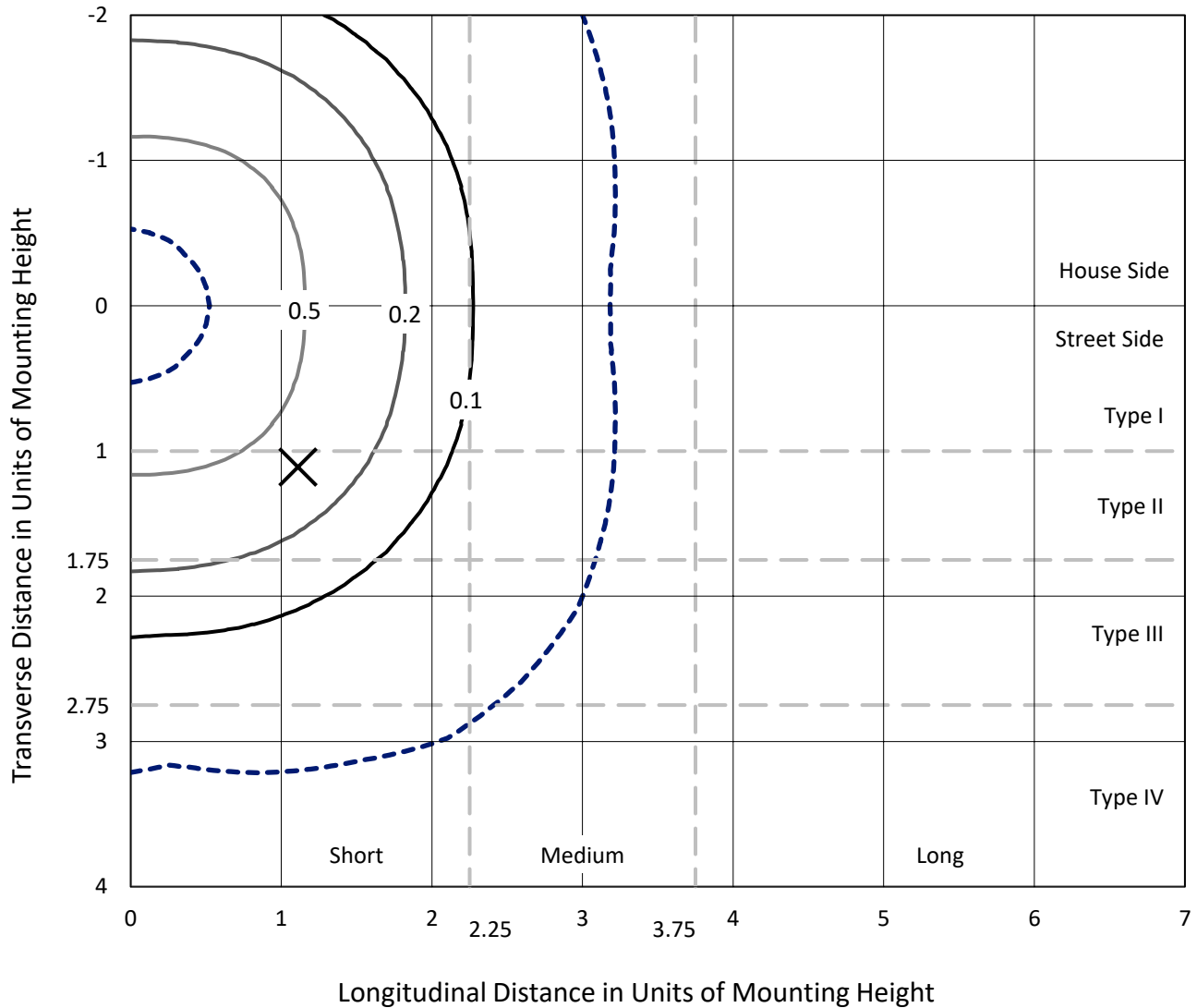
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

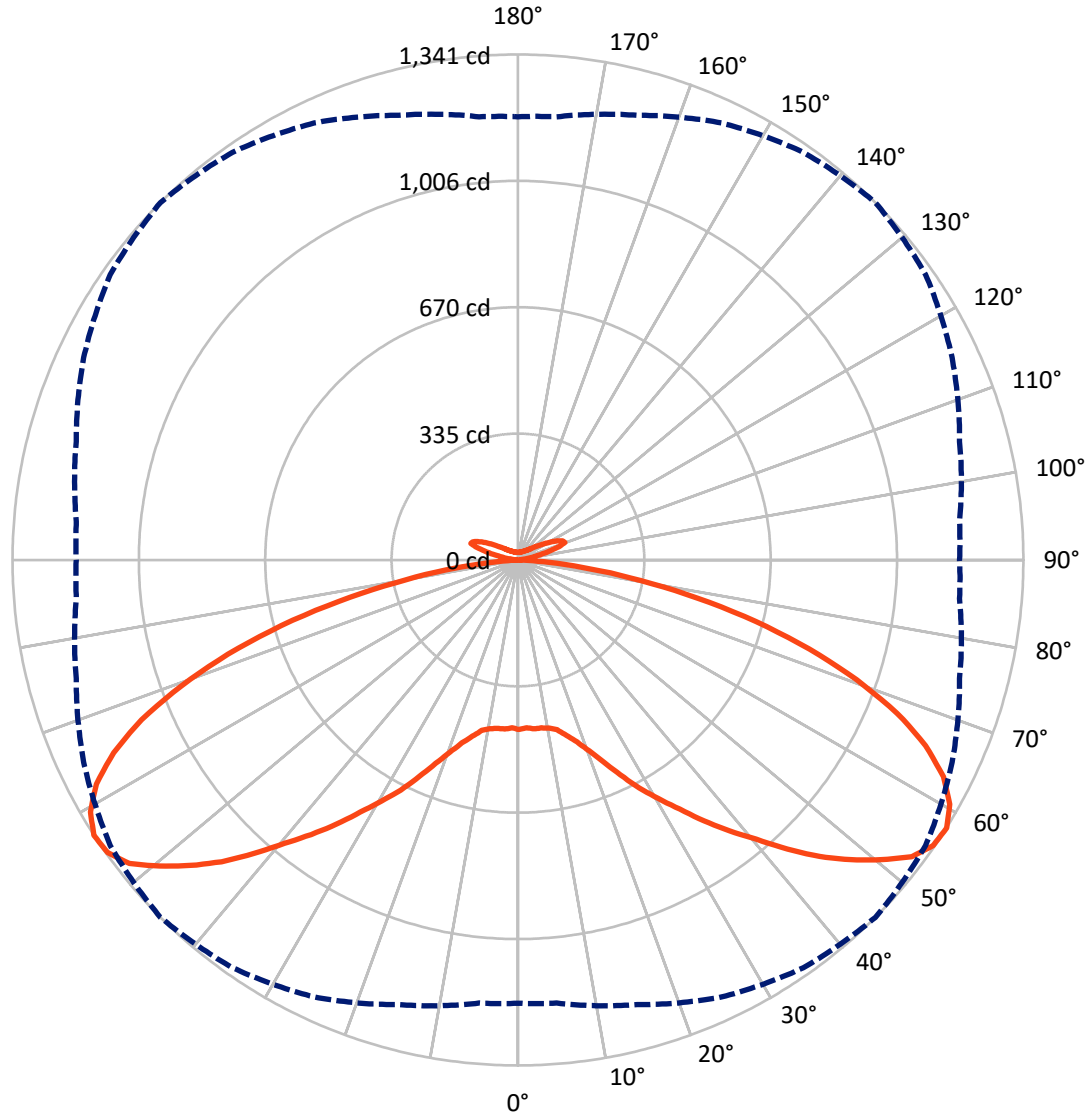
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 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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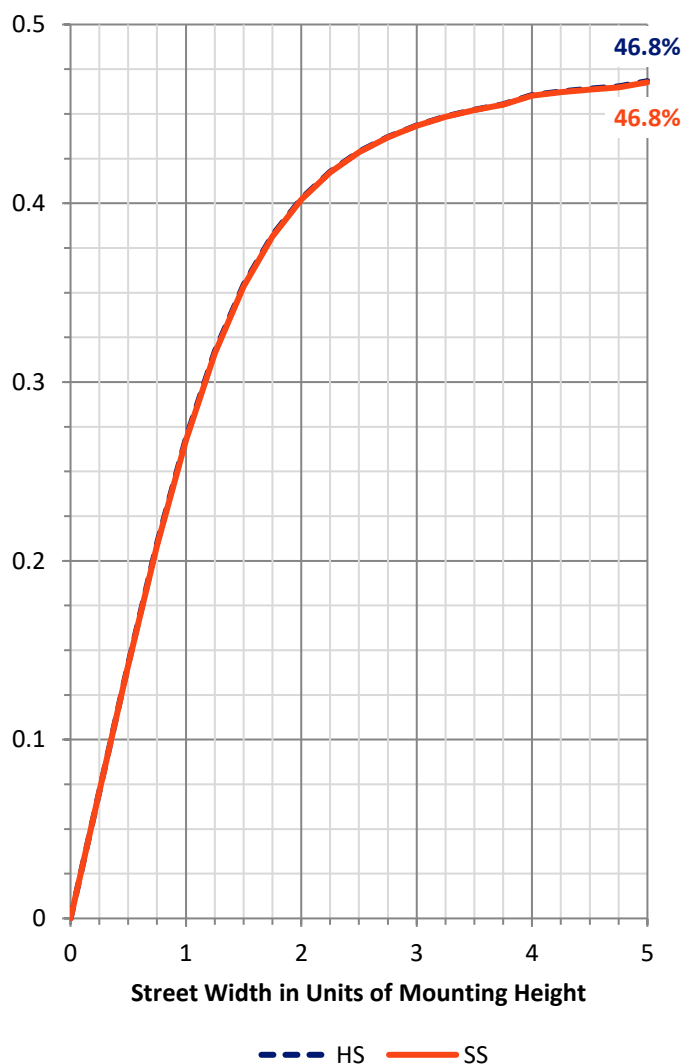
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2380.2	150.2	2530.5
	% Fixture	47.0	3.0	50.0
Street Side	Lumens	2380.2	150.2	2530.5
	% Fixture	47.0	3.0	50.0
Total	Lumens	4760.4	300.5	5060.9
	% Fixture	94.1	5.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.8
10°-20°	138.6	2.7
20°-30°	291.7	5.8
30°-40°	525.9	10.4
40°-50°	836.0	16.5
50°-60°	1115.3	22.0
60°-70°	1077.6	21.3
70°-80°	624.4	12.3
80°-90°	108.0	2.1
90°-100°	6.7	0.1
100°-110°	68.2	1.3
110°-120°	99.6	2.0
120°-130°	57.8	1.1
130°-140°	30.6	0.6
140°-150°	18.2	0.4
150°-160°	11.2	0.2
160°-170°	6.1	0.1
170°-180°	2.0	0.0
0°-90°	4760.4	94.1
0°-180°	5060.9	100.0

Coefficient of Utilization



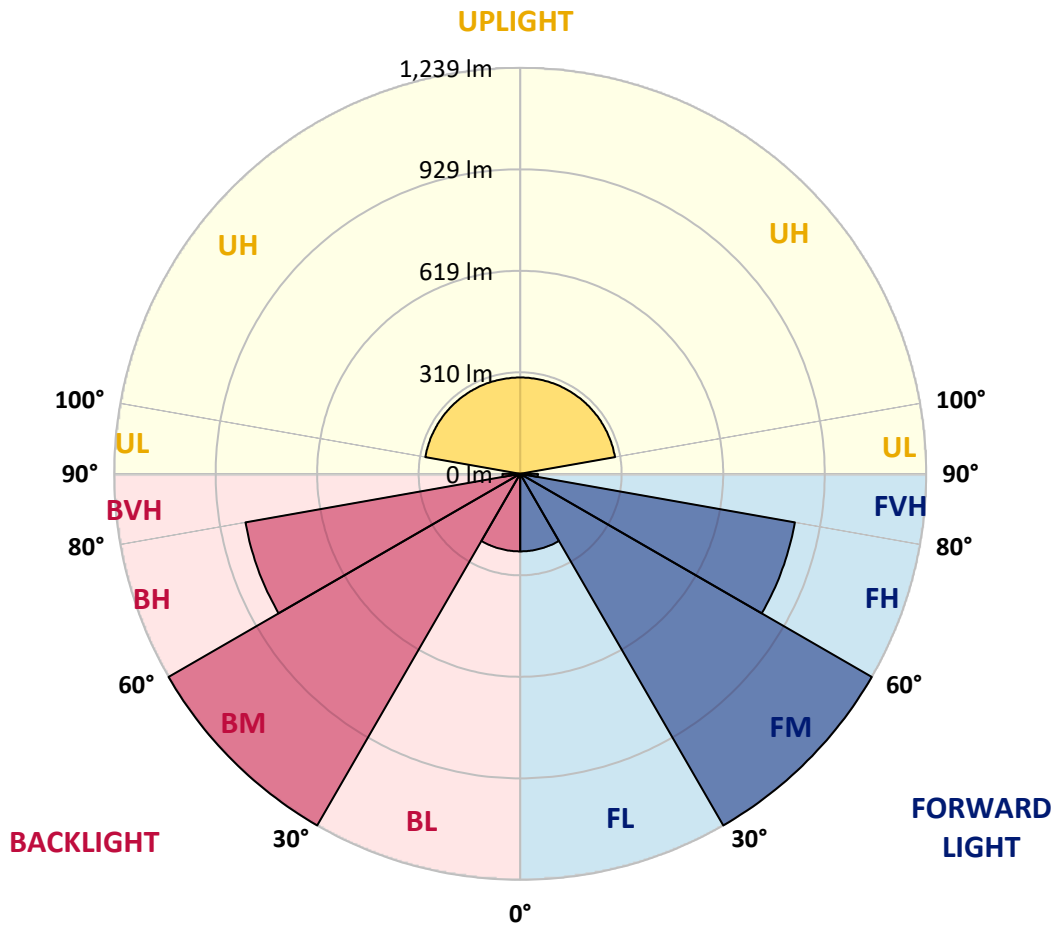
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	236.6	4.7			
FM (30°-60°)	1238.6	24.5			
FH (60°-80°)	851.0	16.8			G1/1800
FVH (80°-90°)	54.0	1.1			G1/100
BL (0°-30°)	236.6	4.7	B1/500		
BM (30°-60°)	1238.6	24.5	B2/2500		
BH (60°-80°)	851.0	16.8	B2/1000		G1/1800
BVH (80°-90°)	54.0	1.1			G1/100
UL (90°-100°)	6.7	0.1		U1/10	
UH (100°-180°)	293.8	5.8		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°	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7
2.5°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
5°	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7	449.7
7.5°	445.5	445.5	449.7	449.7	449.7	449.7	449.7	449.7	449.7	445.5	445.5
10°	449.7	449.7	449.7	453.8	453.8	453.8	453.8	453.8	449.7	449.7	449.7
12.5°	457.9	457.9	462.0	462.0	462.0	462.0	462.0	462.0	462.0	457.9	457.9
15°	478.5	478.5	478.5	482.7	482.7	482.7	482.7	482.7	478.5	478.5	478.5
17.5°	499.2	499.2	503.3	503.3	507.4	507.4	507.4	503.3	503.3	503.3	503.3
20°	528.0	528.0	532.2	532.2	536.3	540.4	540.4	536.3	532.2	532.2	532.2
22.5°	565.2	569.3	569.3	569.3	573.4	581.7	577.6	573.4	569.3	569.3	569.3
25°	610.6	614.7	618.8	618.8	622.9	631.2	631.2	618.8	618.8	618.8	618.8
27.5°	664.2	668.3	672.4	672.4	676.6	684.8	680.7	672.4	672.4	668.3	668.3
30°	713.7	717.8	721.9	726.1	730.2	734.3	734.3	726.1	721.9	717.8	713.7
32.5°	763.2	763.2	771.4	779.7	787.9	787.9	792.1	779.7	771.4	763.2	759.1
35°	812.7	816.8	820.9	833.3	845.7	849.8	845.7	833.3	820.9	812.7	812.7
37.5°	866.3	870.5	874.6	891.1	903.5	911.7	903.5	891.1	874.6	866.3	862.2
40°	924.1	928.2	932.3	953.0	965.3	973.6	961.2	948.8	932.3	924.1	920.0
42.5°	977.7	986.0	994.2	1019.0	1039.6	1047.8	1035.5	1014.8	998.3	977.7	973.6
45°	1043.7	1052.0	1064.3	1089.1	1109.7	1122.1	1105.6	1085.0	1060.2	1043.7	1039.6
47.5°	1097.3	1105.6	1118.0	1151.0	1179.9	1188.1	1171.6	1146.9	1113.8	1093.2	1089.1
50°	1138.6	1146.9	1171.6	1208.7	1241.7	1250.0	1233.5	1200.5	1163.4	1134.5	1130.3
52.5°	1171.6	1179.9	1208.7	1258.2	1295.4	1307.7	1287.1	1250.0	1200.5	1167.5	1163.4
55°	1188.1	1192.2	1229.4	1283.0	1320.1	1336.6	1316.0	1274.7	1221.1	1184.0	1179.9
57.5°	1175.7	1179.9	1221.1	1278.9	1320.1	1340.7	1320.1	1270.6	1212.9	1175.7	1171.6
60°	1151.0	1151.0	1188.1	1254.1	1303.6	1316.0	1295.4	1245.9	1184.0	1146.9	1142.7
62.5°	1105.6	1101.5	1146.9	1204.6	1254.1	1266.5	1250.0	1200.5	1138.6	1101.5	1097.3
65°	1019.0	1010.7	1076.7	1130.3	1175.7	1188.1	1175.7	1130.3	1072.6	1014.8	1006.6
67.5°	915.8	903.5	965.3	1027.2	1068.5	1085.0	1068.5	1031.3	965.3	907.6	903.5
70°	808.6	796.2	845.7	899.3	944.7	953.0	936.5	899.3	837.4	800.3	800.3
72.5°	680.7	668.3	713.7	754.9	800.3	808.6	792.1	759.1	713.7	676.6	672.4
75°	540.4	528.0	569.3	602.3	647.7	651.8	643.6	606.4	569.3	532.2	532.2
77.5°	400.2	387.8	420.8	449.7	486.8	486.8	482.7	453.8	420.8	396.0	396.0
80°	264.0	255.8	284.6	297.0	330.0	330.0	325.9	305.3	280.5	264.0	259.9
82.5°	148.5	140.3	165.0	169.1	193.9	193.9	189.8	173.3	156.8	144.4	144.4
85°	57.8	49.5	66.0	70.1	82.5	82.5	78.4	74.3	61.9	53.6	53.6
87.5°	4.1	4.1	8.3	8.3	12.4	12.4	12.4	8.3	8.3	4.1	4.1
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)