

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: P833569

Luminaire Tested: **TTN-D2-740-U-RW-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833569
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-D2-740-U-RW-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5478.9 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U3 - G2

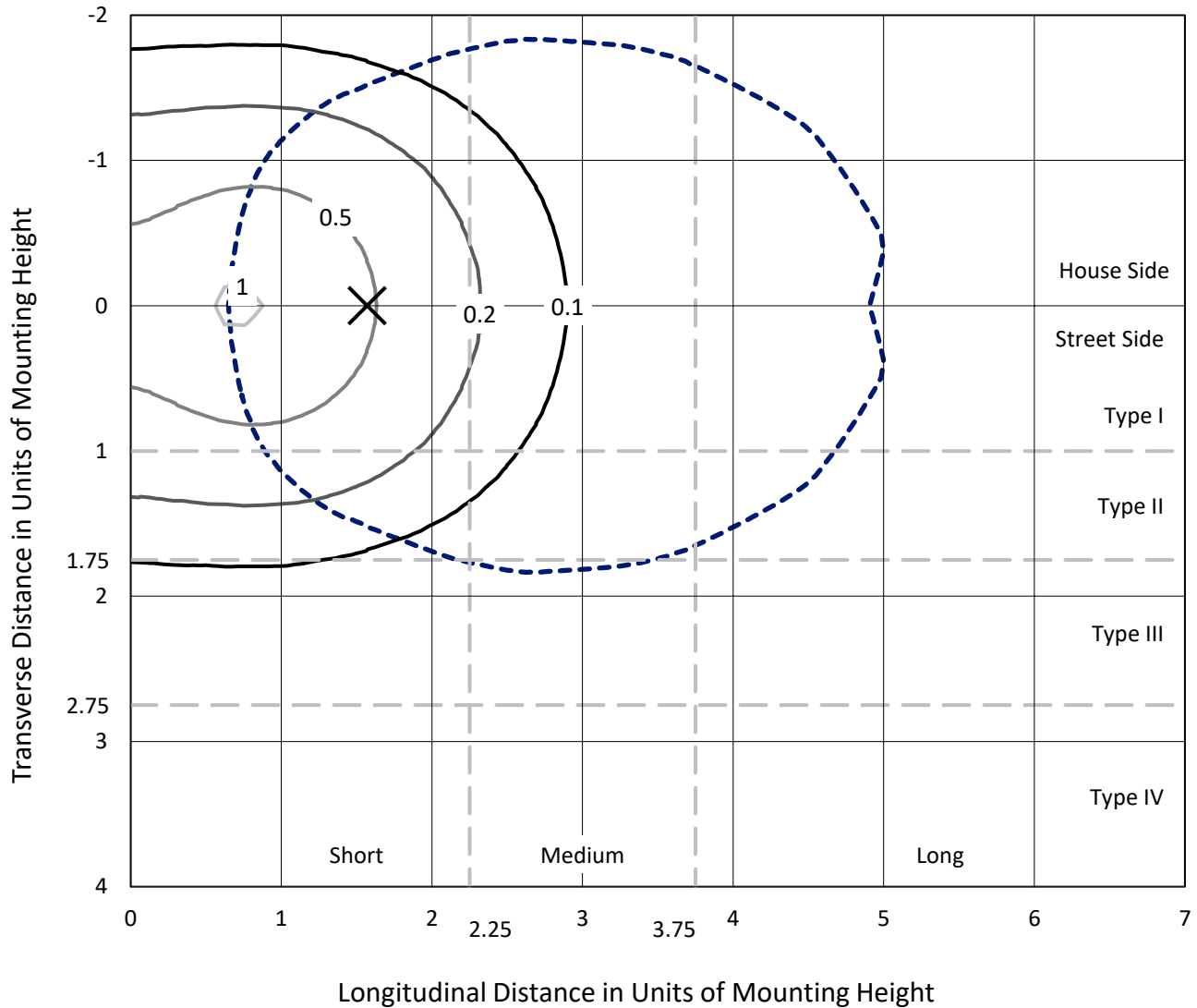
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

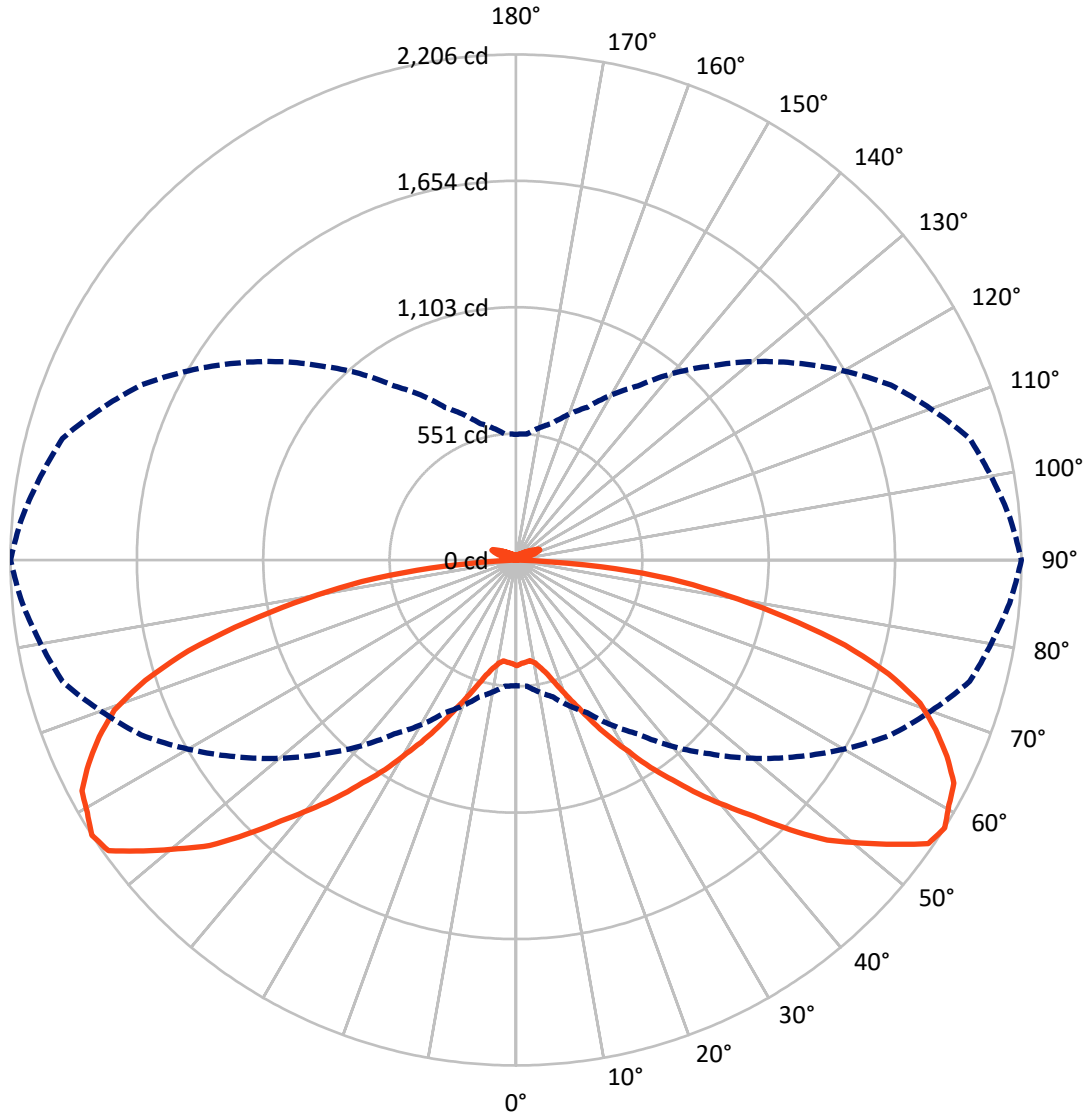
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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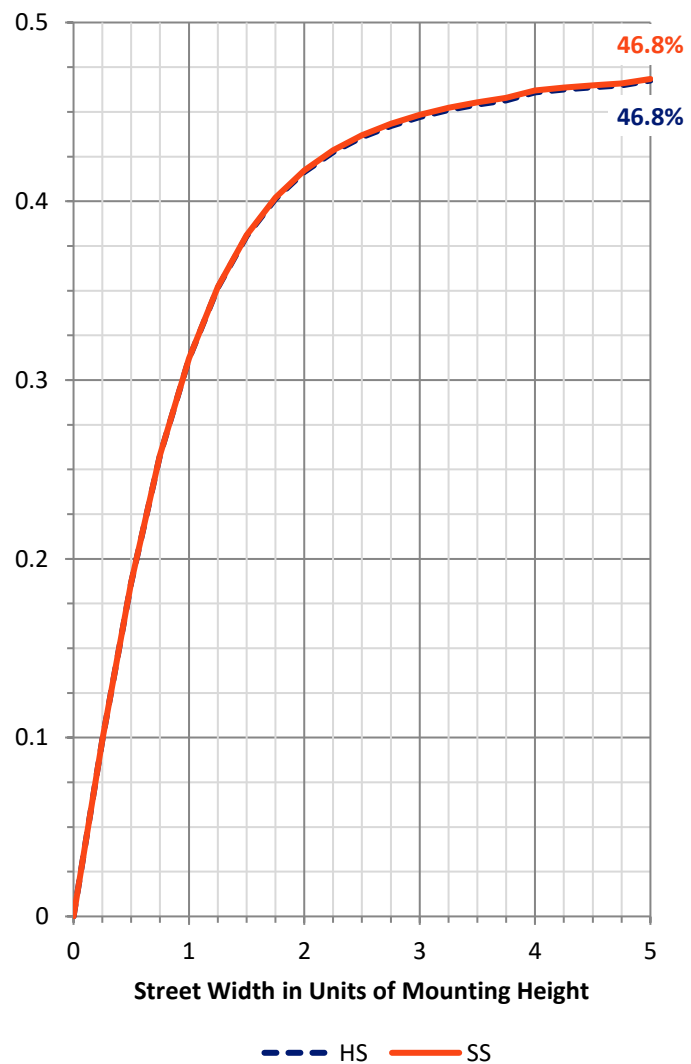
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2577.7	161.7	2739.4
	% Fixture	47.0	3.0	50.0
Street Side	Lumens	2577.7	161.7	2739.4
	% Fixture	47.0	3.0	50.0
Total	Lumens	5155.4	323.4	5478.9
	% Fixture	94.1	5.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	0.8
10°-20°	138.2	2.5
20°-30°	288.4	5.3
30°-40°	517.3	9.4
40°-50°	826.5	15.1
50°-60°	1131.6	20.7
60°-70°	1167.2	21.3
70°-80°	830.0	15.2
80°-90°	212.9	3.9
90°-100°	7.2	0.1
100°-110°	73.4	1.3
110°-120°	107.3	2.0
120°-130°	62.3	1.1
130°-140°	33.0	0.6
140°-150°	19.6	0.4
150°-160°	12.1	0.2
160°-170°	6.6	0.1
170°-180°	2.1	0.0
0°-90°	5155.4	94.1
0°-180°	5478.9	100.0

Coefficient of Utilization

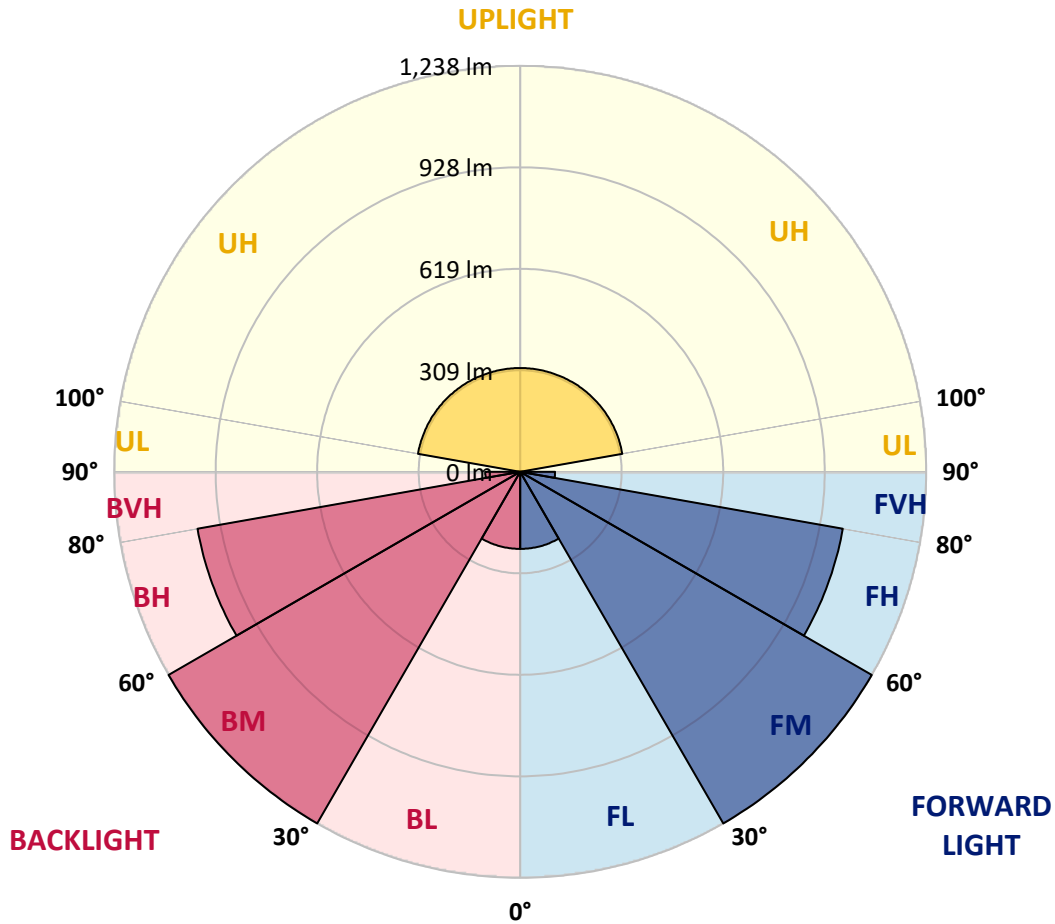


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	235.0	4.3			
FM (30°-60°)	1237.7	22.6			
FH (60°-80°)	998.6	18.2			G1/1800
FVH (80°-90°)	106.5	1.9			G2/225
BL (0°-30°)	235.0	4.3	B1/500		
BM (30°-60°)	1237.7	22.6	B2/2500		
BH (60°-80°)	998.6	18.2	B2/1000		G2/1000
BVH (80°-90°)	106.5	1.9			G2/225
UL (90°-100°)	7.2	0.1		U1/10	
UH (100°-180°)	316.2	5.8		U3/500	

BUG Rating: B2-U3-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1	461.1
2.5°	461.1	461.1	456.8	456.8	456.8	452.4	452.4	452.4	452.4	448.1	452.4
5°	461.1	461.1	461.1	461.1	456.8	452.4	452.4	452.4	448.1	448.1	448.1
7.5°	456.8	456.8	456.8	456.8	452.4	448.1	448.1	448.1	443.7	443.7	443.7
10°	452.4	456.8	452.4	452.4	448.1	448.1	452.4	452.4	456.8	456.8	456.8
12.5°	448.1	448.1	448.1	452.4	452.4	456.8	465.5	474.2	478.5	482.9	482.9
15°	448.1	448.1	452.4	456.8	465.5	474.2	487.2	500.3	509.0	517.7	517.7
17.5°	448.1	448.1	452.4	465.5	478.5	495.9	517.7	535.1	552.5	565.5	569.9
20°	448.1	448.1	456.8	474.2	500.3	526.4	556.8	582.9	609.0	630.8	630.8
22.5°	452.4	456.8	465.5	487.2	526.4	565.5	604.7	643.8	674.3	700.4	700.4
25°	461.1	461.1	474.2	509.0	556.8	609.0	665.6	713.5	752.6	787.4	787.4
27.5°	465.5	469.8	487.2	530.7	591.6	656.9	735.2	791.8	844.0	874.4	878.8
30°	474.2	478.5	504.6	548.1	622.1	704.8	796.1	874.4	931.0	961.4	970.1
32.5°	478.5	482.9	517.7	569.9	652.5	748.3	852.7	952.7	1031.0	1065.8	1078.9
35°	491.6	495.9	530.7	591.6	687.4	796.1	917.9	1035.4	1126.7	1170.2	1178.9
37.5°	504.6	509.0	543.8	613.4	722.2	848.3	987.5	1122.4	1226.8	1279.0	1296.4
40°	513.3	517.7	556.8	639.5	761.3	904.9	1065.8	1213.7	1331.2	1396.5	1409.5
42.5°	526.4	530.7	574.2	661.3	796.1	961.4	1148.5	1313.8	1440.0	1513.9	1531.3
45°	539.4	543.8	591.6	687.4	835.3	1022.3	1231.1	1431.3	1574.8	1661.8	1679.2
47.5°	552.5	556.8	609.0	713.5	874.4	1083.2	1318.2	1535.7	1709.7	1792.3	1827.1
50°	556.8	565.5	617.7	730.9	900.5	1135.4	1392.1	1640.1	1822.8	1931.5	1940.2
52.5°	561.2	569.9	626.4	743.9	922.3	1174.6	1453.0	1727.1	1940.2	2070.8	2062.1
55°	565.5	565.5	626.4	743.9	931.0	1200.7	1496.5	1783.6	2018.6	2123.0	2183.9
57.5°	548.1	552.5	617.7	735.2	926.6	1196.3	1496.5	1805.4	2049.0	2162.1	2205.6
60°	526.4	535.1	596.0	713.5	909.2	1183.3	1487.8	1796.7	2062.1	2183.9	2170.8
62.5°	495.9	513.3	565.5	683.0	883.1	1152.8	1474.8	1774.9	2031.6	2157.8	2144.7
65°	461.1	478.5	526.4	652.5	826.6	1078.9	1405.2	1731.4	1948.9	2092.5	2066.4
67.5°	426.3	439.4	487.2	600.3	761.3	1000.6	1313.8	1635.7	1831.5	1988.1	1975.0
70°	387.2	391.5	439.4	539.4	696.1	922.3	1226.8	1500.9	1727.1	1844.5	1870.6
72.5°	339.3	339.3	387.2	474.2	617.7	817.9	1109.3	1348.6	1561.8	1661.8	1701.0
75°	278.4	282.8	321.9	400.2	517.7	700.4	944.0	1187.6	1366.0	1470.4	1483.5
77.5°	217.5	221.9	252.3	317.6	417.6	565.5	778.7	970.1	1139.8	1231.1	1205.0
80°	156.6	161.0	182.7	230.6	308.9	422.0	600.3	770.0	891.8	965.8	931.0
82.5°	95.7	100.1	113.1	143.6	195.8	274.1	408.9	535.1	630.8	691.7	678.7
85°	47.9	47.9	56.6	65.3	82.7	121.8	195.8	269.7	343.7	387.2	374.1
87.5°	8.7	13.1	13.1	13.1	13.1	8.7	13.1	13.1	13.1	21.8	8.7
90°	2.8	2.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8	2.8
92.5°	2.8	2.8	2.8	3.9	4.4	3.9	4.4	3.3	3.3	2.8	2.8
95°	3.3	3.3	3.9	5.0	6.1	6.6	6.6	3.9	3.9	3.3	3.3
97.5°	4.4	5.0	5.0	6.1	10.0	18.3	11.1	5.5	5.5	5.0	4.4
100°	7.2	7.7	7.7	13.8	29.3	39.3	28.2	14.4	10.5	7.7	7.7
102.5°	23.2	24.3	29.9	44.8	66.4	60.3	50.9	48.1	33.2	26.6	25.5
105°	59.2	58.7	63.1	74.7	93.0	91.3	84.1	76.4	65.8	60.9	60.9
107.5°	78.0	78.0	81.9	91.9	105.7	123.4	125.1	99.0	86.9	81.3	80.8
110°	88.0	88.0	91.3	99.6	117.9	142.8	141.6	122.3	107.3	100.2	99.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	90.2	90.7	95.2	107.9	127.8	138.9	133.9	126.2	119.5	114.0	112.9
115°	93.5	93.5	98.5	110.7	121.7	126.2	120.6	114.5	110.1	107.9	109.0
117.5°	92.4	94.1	95.2	101.8	109.0	112.3	109.6	101.3	97.9	96.8	95.2
120°	85.8	85.8	86.9	90.2	94.1	95.7	94.6	89.1	86.3	85.8	84.7
122.5°	76.4	76.9	76.4	78.0	80.8	82.4	81.3	76.9	75.8	75.8	74.7
125°	67.0	67.0	66.4	67.5	69.2	68.6	69.2	67.0	66.4	66.4	65.8
127.5°	60.3	59.8	58.7	59.2	59.8	59.8	60.3	58.1	58.7	59.2	58.7
130°	53.7	53.7	52.6	52.6	52.6	51.5	52.6	51.5	52.0	52.6	53.1
132.5°	47.6	47.6	45.9	45.4	45.4	45.4	45.9	45.4	46.5	47.6	47.6
135°	42.6	42.6	40.9	41.5	41.5	40.9	41.5	40.9	42.1	42.6	42.6
137.5°	38.7	38.7	37.6	37.6	37.6	37.1	37.6	37.6	38.2	39.3	39.8
140°	35.4	35.4	34.9	34.9	34.3	34.9	34.9	34.9	35.4	36.0	36.0
142.5°	33.8	33.2	32.6	32.1	32.6	32.6	32.6	32.1	32.6	33.8	33.8
145°	31.0	31.0	30.4	30.4	30.4	31.0	30.4	30.4	31.0	31.0	31.5
147.5°	29.3	29.3	28.8	29.3	29.3	29.3	29.3	28.8	29.3	29.3	29.9
150°	28.8	28.2	27.7	28.2	28.2	27.7	27.7	27.7	27.7	28.2	28.2
152.5°	27.1	27.1	26.6	27.1	26.6	26.6	26.6	26.6	26.6	27.1	27.7
155°	26.0	26.0	25.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
157.5°	24.9	25.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	25.5	25.5
160°	24.3	24.3	24.3	24.3	23.8	23.8	23.8	24.3	24.3	24.3	24.9
162.5°	23.8	23.8	23.8	23.8	23.2	23.2	23.2	23.2	23.8	23.8	24.3
165°	23.8	23.2	23.2	23.2	22.7	22.7	22.7	22.7	23.2	23.8	23.2
167.5°	22.7	22.7	22.7	22.7	22.7	22.1	22.1	22.7	22.7	22.7	23.2
170°	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.1	22.7
172.5°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.1	22.1	22.7	22.7
175°	22.7	22.7	22.7	22.7	22.1	22.1	22.1	22.7	22.7	22.7	22.1
177.5°	22.7	22.7	22.7	22.7	22.1	22.7	22.7	22.7	22.7	22.7	22.7
180°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7

(END OF REPORT)