

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: P833566

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833566
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-CG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5157.9 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U3 - G2

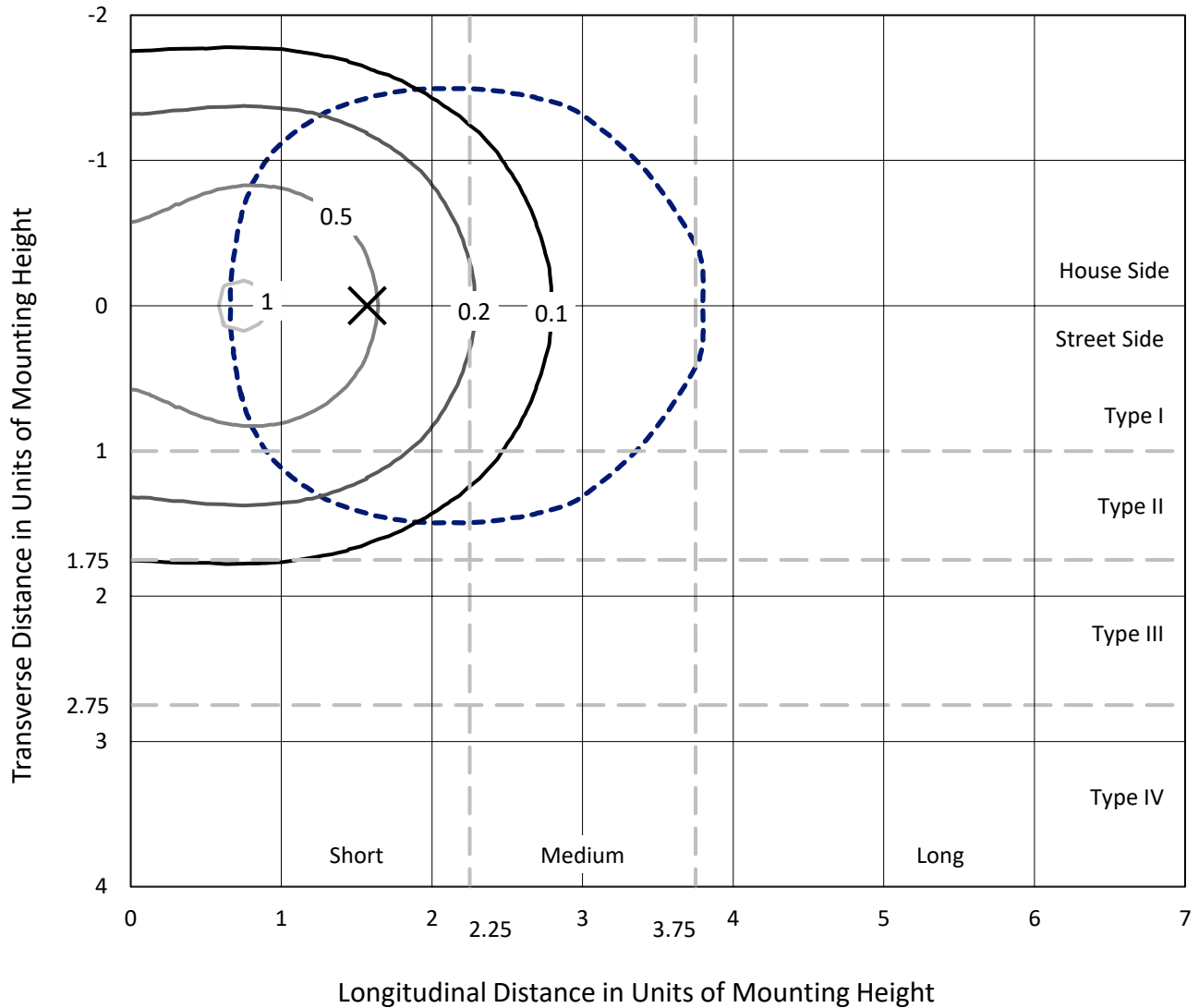
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

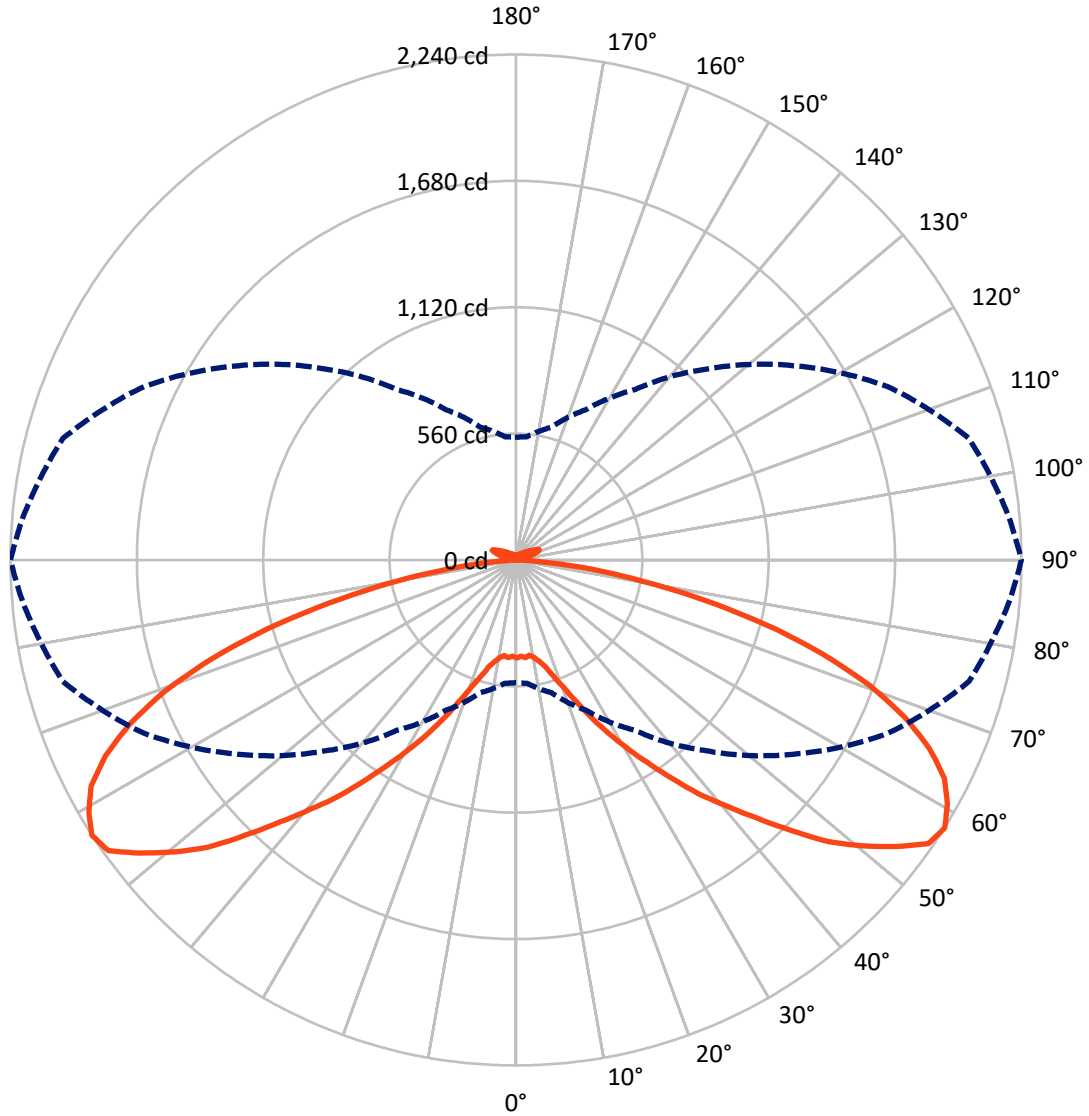
✕ Max cd
 - - - 1/2 Max cd



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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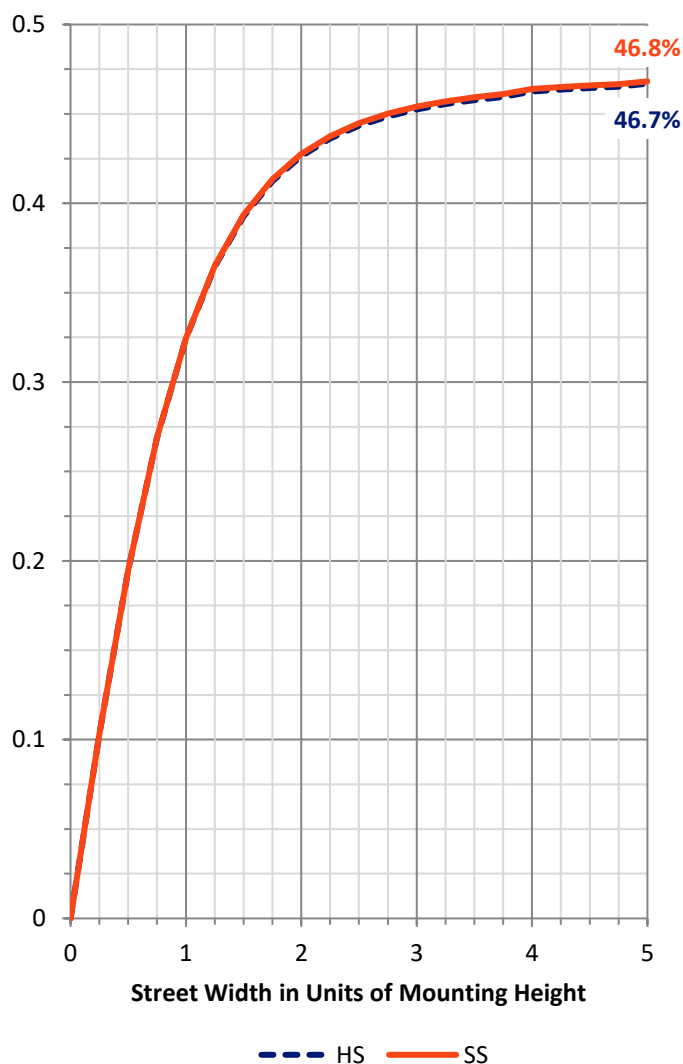
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2417.2	161.7	2578.9
	% Fixture	46.9	3.1	50.0
Street Side	Lumens	2417.2	161.7	2578.9
	% Fixture	46.9	3.1	50.0
Total	Lumens	4834.4	323.4	5157.9
	% Fixture	93.7	6.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	0.8
10°-20°	133.6	2.6
20°-30°	284.3	5.5
30°-40°	523.9	10.2
40°-50°	843.6	16.4
50°-60°	1141.8	22.1
60°-70°	1110.2	21.5
70°-80°	645.9	12.5
80°-90°	109.6	2.1
90°-100°	7.2	0.1
100°-110°	73.4	1.4
110°-120°	107.3	2.1
120°-130°	62.3	1.2
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°	4834.4	93.7
0°-180°	5157.9	100.0

Coefficient of Utilization

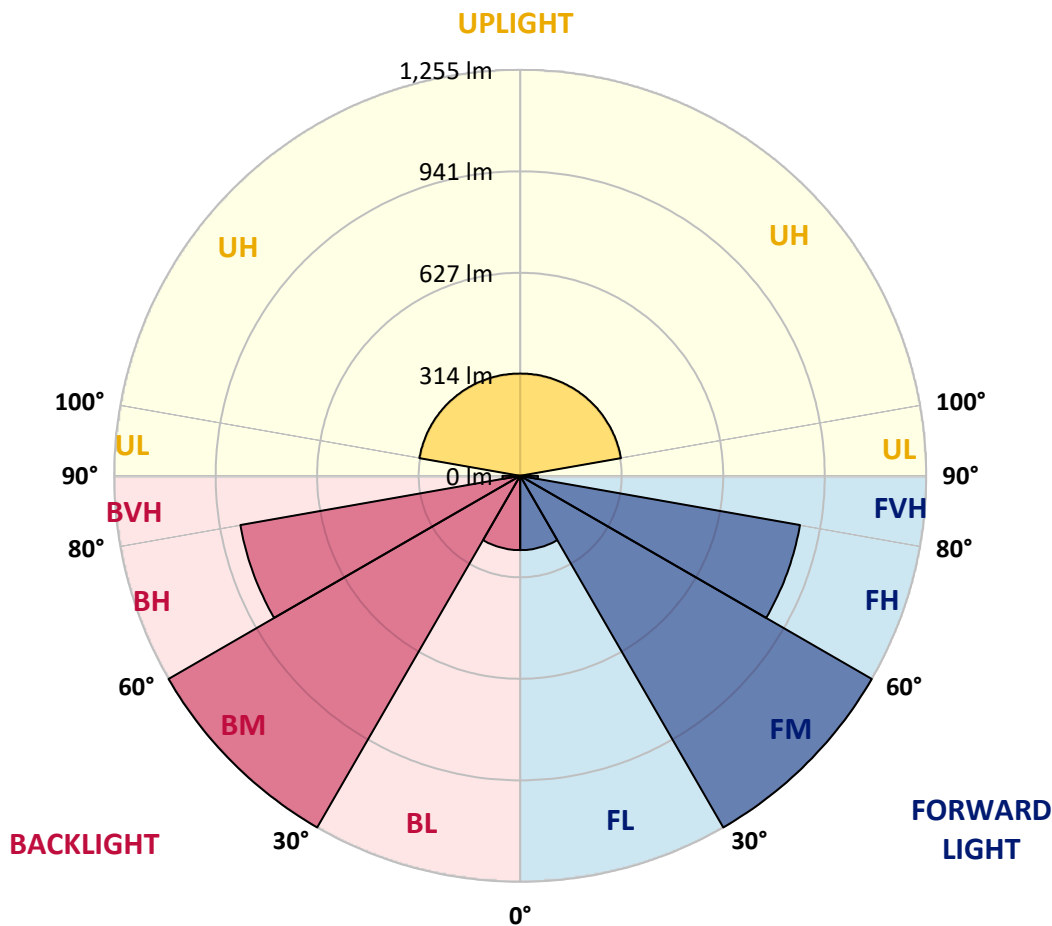


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.6	4.5			
FM (30°-60°)	1254.7	24.3			
FH (60°-80°)	878.1	17.0			G1/1800
FVH (80°-90°)	54.8	1.1			G1/100
BL (0°-30°)	229.6	4.5	B1/500		
BM (30°-60°)	1254.7	24.3	B2/2500		
BH (60°-80°)	878.1	17.0	B2/1000		G2/1000
BVH (80°-90°)	54.8	1.1			G1/100
UL (90°-100°)	7.2	0.1		U1/10	
UH (100°-180°)	316.2	6.1		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°	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9	434.9
2.5°	434.9	434.9	434.9	434.9	430.6	430.6	430.6	426.2	426.2	426.2	426.2
5°	434.9	434.9	434.9	439.3	439.3	439.3	434.9	434.9	434.9	434.9	434.9
7.5°	434.9	439.3	439.3	434.9	434.9	430.6	430.6	430.6	426.2	426.2	426.2
10°	434.9	434.9	434.9	434.9	430.6	430.6	434.9	434.9	439.3	439.3	439.3
12.5°	430.6	430.6	434.9	434.9	434.9	439.3	448.0	452.3	456.7	461.0	461.0
15°	434.9	434.9	439.3	443.6	448.0	456.7	469.7	482.8	491.5	495.8	491.5
17.5°	434.9	439.3	443.6	452.3	465.4	478.4	500.2	517.6	535.0	539.3	543.7
20°	443.6	443.6	448.0	465.4	487.1	508.9	539.3	569.8	591.5	600.2	600.2
22.5°	448.0	452.3	456.7	478.4	513.2	548.0	591.5	626.3	656.8	674.2	678.5
25°	461.0	461.0	469.7	500.2	543.7	595.9	652.4	704.6	743.7	765.5	769.8
27.5°	469.7	474.1	487.1	526.3	582.8	648.1	726.3	787.2	835.1	861.2	865.5
30°	478.4	482.8	508.9	552.4	622.0	700.2	791.6	869.9	930.8	961.2	965.6
32.5°	491.5	495.8	526.3	574.1	656.8	752.4	856.8	952.5	1039.5	1065.6	1069.9
35°	504.5	508.9	543.7	600.2	695.9	804.6	926.4	1039.5	1143.9	1178.7	1187.4
37.5°	517.6	521.9	556.7	626.3	735.0	861.2	1004.7	1139.5	1252.6	1300.5	1313.5
40°	530.6	535.0	574.1	652.4	774.2	922.1	1087.3	1235.2	1365.7	1422.2	1430.9
42.5°	539.3	543.7	587.2	674.2	813.3	978.6	1174.3	1339.6	1478.8	1552.7	1561.4
45°	552.4	556.7	604.6	704.6	848.1	1043.8	1257.0	1457.0	1618.0	1700.6	1709.3
47.5°	561.1	565.4	617.6	722.0	887.3	1104.7	1344.0	1561.4	1752.8	1839.8	1865.9
50°	565.4	569.8	626.3	739.4	913.4	1148.2	1413.5	1665.8	1870.2	1979.0	1992.0
52.5°	565.4	574.1	630.7	752.4	930.8	1187.4	1470.1	1752.8	1983.3	2105.1	2109.4
55°	561.1	565.4	626.3	748.1	939.5	1204.8	1509.2	1805.0	2061.6	2179.0	2218.2
57.5°	543.7	548.0	608.9	735.0	922.1	1196.1	1500.5	1818.0	2079.0	2192.1	2239.9
60°	517.6	526.3	582.8	704.6	896.0	1165.6	1474.4	1791.9	2052.9	2192.1	2196.4
62.5°	487.1	491.5	548.0	665.5	856.8	1117.8	1426.6	1739.7	1992.0	2135.5	2131.2
65°	443.6	448.0	495.8	617.6	787.2	1026.4	1330.9	1657.1	1874.6	2026.8	2013.8
67.5°	395.8	400.1	443.6	552.4	704.6	926.4	1200.4	1517.9	1709.3	1865.9	1857.2
70°	343.6	343.6	382.7	474.1	617.6	813.3	1056.9	1335.3	1526.6	1657.1	1661.5
72.5°	282.7	282.7	317.5	395.8	517.6	682.8	891.6	1139.5	1296.1	1409.2	1417.9
75°	221.8	217.5	247.9	313.2	408.8	543.7	704.6	917.7	1039.5	1148.2	1143.9
77.5°	156.6	156.6	174.0	226.2	295.8	404.5	521.9	691.5	774.2	865.5	848.1
80°	100.0	100.0	108.7	147.9	195.7	269.7	343.6	469.7	526.3	595.9	574.1
82.5°	52.2	47.8	56.5	78.3	104.4	147.9	191.4	274.0	300.1	352.3	334.9
85°	17.4	17.4	17.4	26.1	39.1	56.5	73.9	117.4	121.8	156.6	143.5
87.5°	4.3	0.0	0.0	4.3	4.3	4.3	4.3	13.0	13.0	26.1	17.4
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)