

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: LUMIERE

Report Number: G2-1811-015-1

Luminaire Tested: **1900-OA-XX-12LED3525-UNV-BZ**

Test Date: 02/12/19

**Test Information**

Test Method: LM-79-08  
Report Number: G2-1811-015-1  
Test Lab: INNOVATION CENTER(G2)  
Test Date: 02/12/19  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 1900-OA-XX-12LED3525-UNV-BZ  
Description: ASPEN BOLLARD OPEN APERTURE  
Light Source: (1) CITIZEN LED  
CLU711-1204C4-353M2K1  
Ballast/Driver: (1) ERP DRIVER  
ESS015W-0350-42

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 240.4 lumens  
Efficiency: N/A  
Efficacy: 17.3 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.29' x H: 0.08')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B0 - U2 - G0

Input Watts (W): 13.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.117  
Voltage Rise (V): NR  
Power Factor: 0.9864  
Total Harmonic Distortion (THDi): 13.6%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 13 HR  
Ambient Temperature (°C): 24.9  
Test Distance: 25 FT

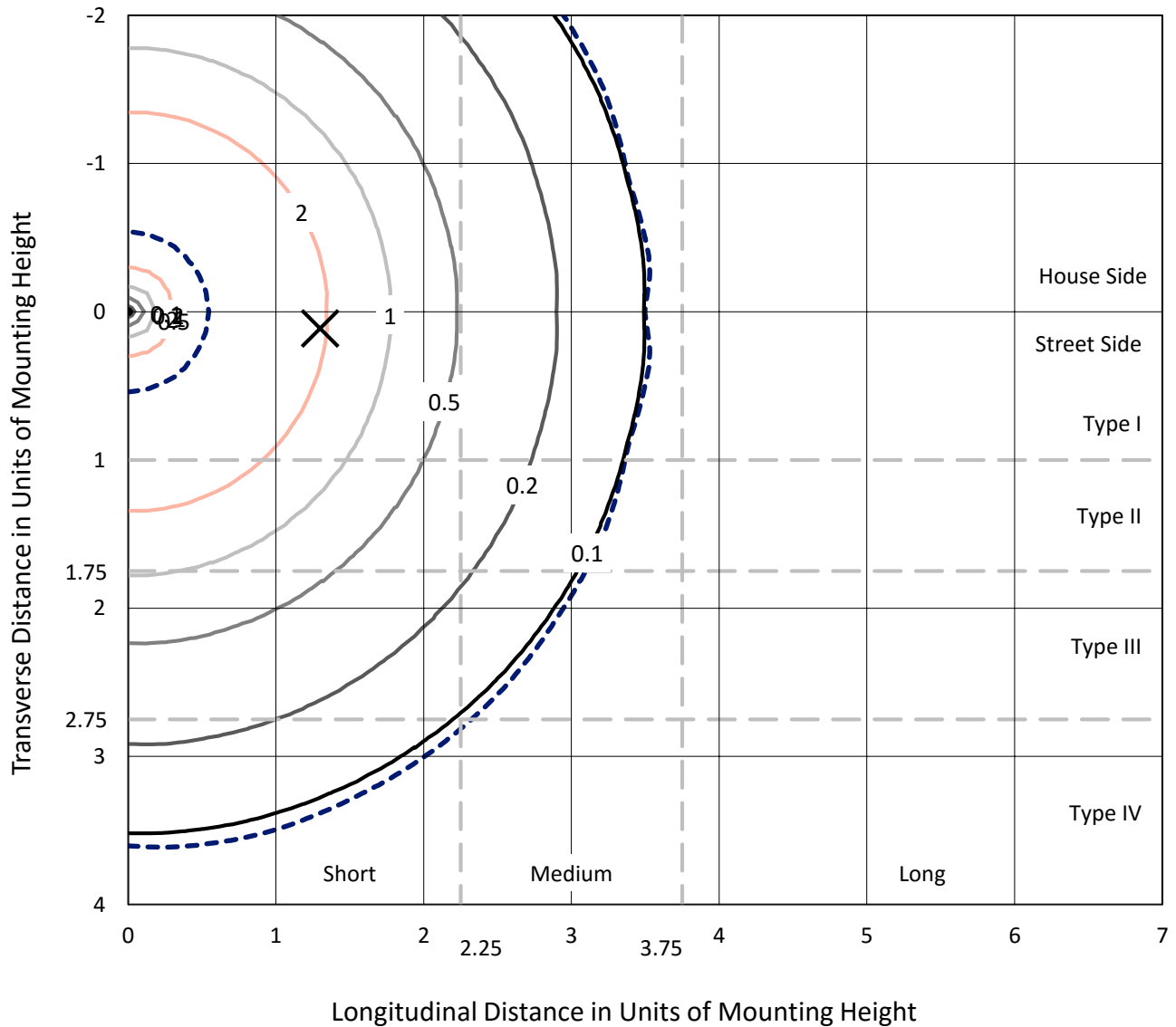


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### Iso-Footcandle Lines of Horizontal Illumination

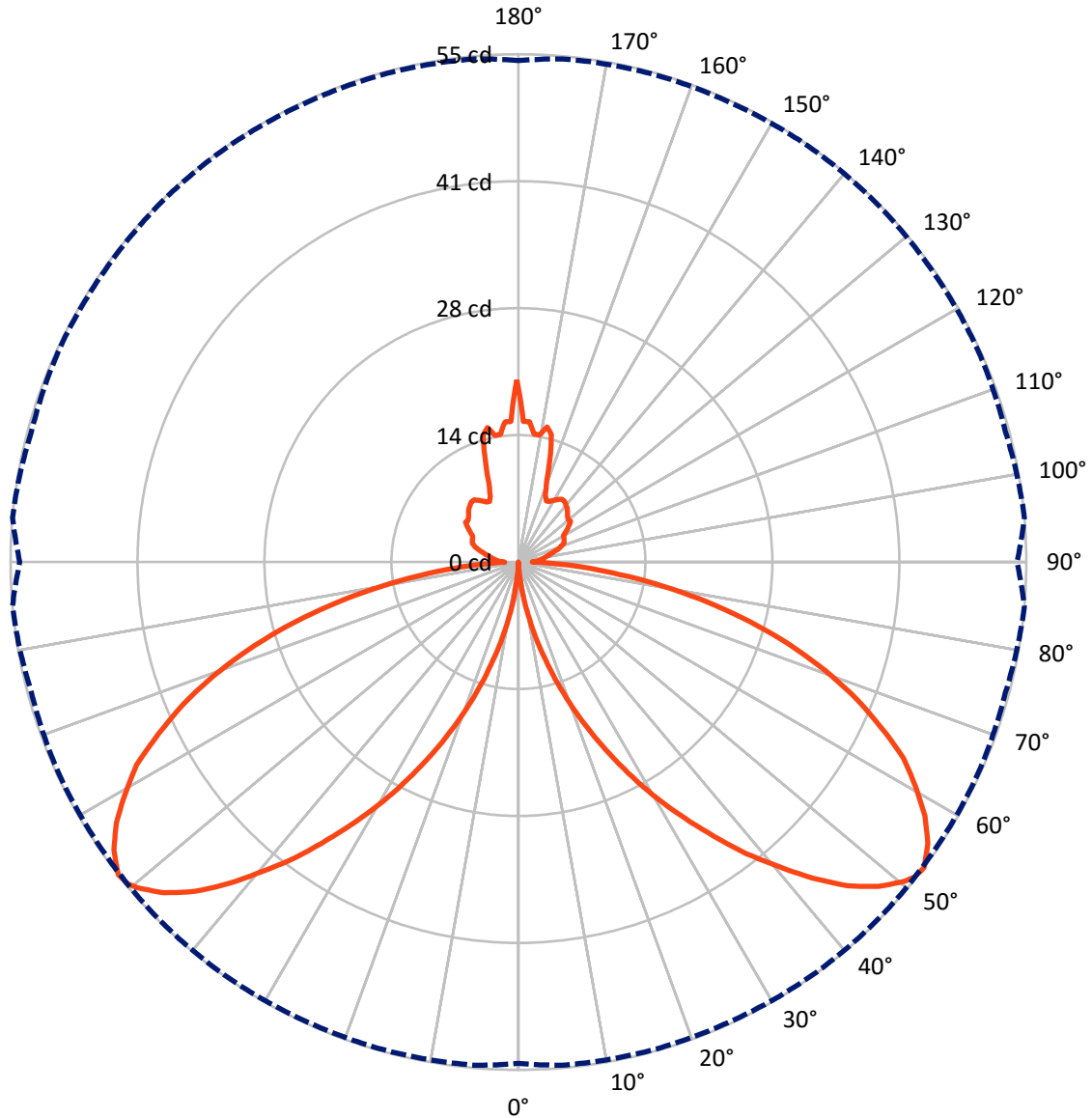
× Max cd  
 - - - 1/2 Max cd



Based on 2.4 foot mounting height. Maximum calculated value = 3.5 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral    - - - Horizontal Cone Through 52.5-Deg Vertical

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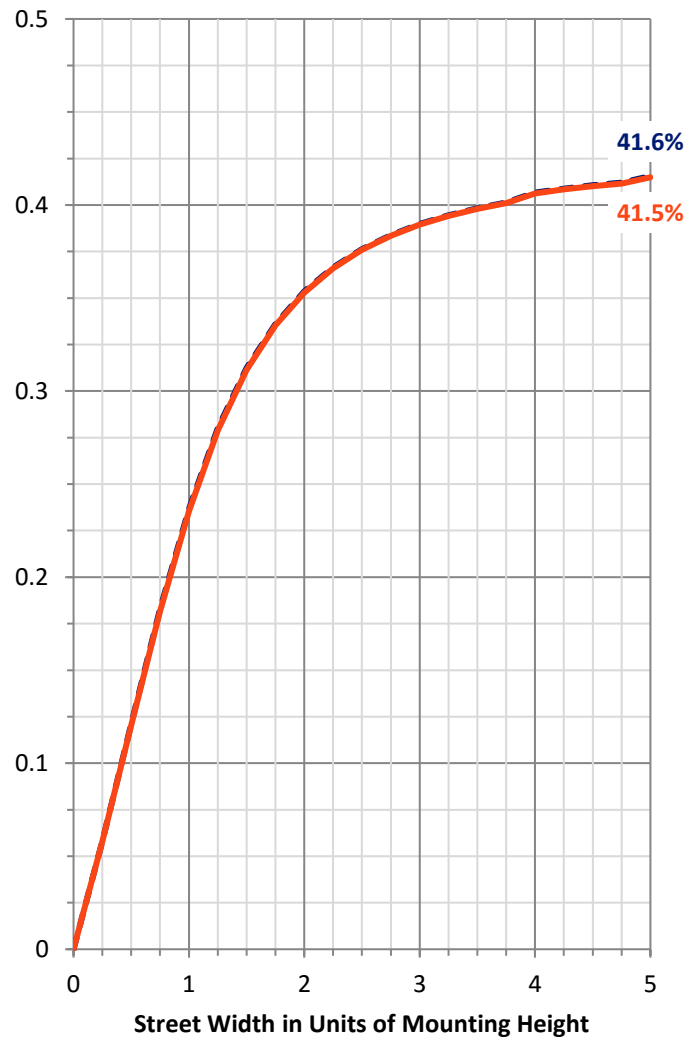
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	101.4	18.8	120.2
	% Fixture	42.2	7.8	50.0
<b>Street Side</b>	Lumens	101.4	18.8	120.2
	% Fixture	42.2	7.8	50.0
<b>Total</b>	Lumens	202.8	37.5	240.4
	% Fixture	84.4	15.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.3	0.1
10°-20°	3.3	1.4
20°-30°	10.9	4.6
30°-40°	23.1	9.6
40°-50°	38.4	16.0
50°-60°	47.7	19.8
60°-70°	42.9	17.9
70°-80°	27.7	11.5
80°-90°	8.4	3.5
90°-100°	2.5	1.1
100°-110°	4.1	1.7
110°-120°	5.4	2.2
120°-130°	5.9	2.5
130°-140°	5.9	2.5
140°-150°	5.1	2.1
150°-160°	3.6	1.5
160°-170°	3.6	1.5
170°-180°	1.4	0.6
0°-90°	202.8	84.4
0°-180°	240.4	100.0



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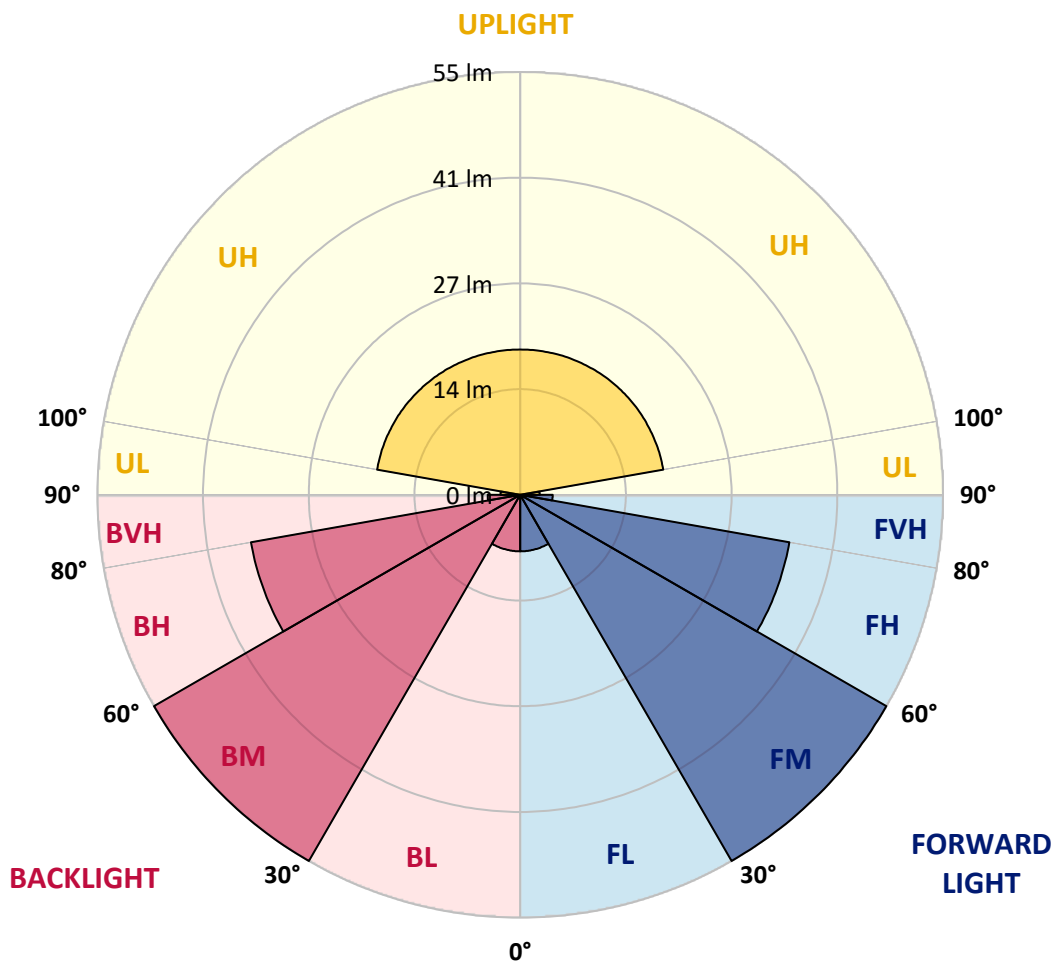
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7.3	3.0			
FM	(30°-60°)	54.6	22.7			
FH	(60°-80°)	35.3	14.7			G0/660
FVH	(80°-90°)	4.2	1.7			G0/10
BL	(0°-30°)	7.3	3.0	B0/110		
BM	(30°-60°)	54.6	22.7	B0/220		
BH	(60°-80°)	35.3	14.7	B0/110		G0/660
BVH	(80°-90°)	4.2	1.7			G0/10
UL	(90°-100°)	2.5	1.1		U1/10	
UH	(100°-180°)	18.8	7.8		U2/50	

**BUG Rating: B0-U2-G0**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
5°	1.9	1.7	1.6	1.6	1.5	1.4	1.6	1.5	1.3	1.4	1.3
7.5°	4.1	3.9	3.9	3.8	3.9	3.8	3.9	3.8	3.7	3.8	3.8
10°	6.1	6.0	6.0	6.0	6.0	5.9	6.0	5.9	6.0	5.9	5.8
12.5°	8.7	8.6	8.5	8.6	8.5	8.4	8.6	8.4	8.4	8.4	8.3
15°	11.3	11.1	11.2	11.2	11.1	11.0	11.2	11.1	10.9	11.0	10.9
17.5°	14.2	14.0	14.1	14.1	13.9	13.9	14.1	14.0	13.8	13.9	13.7
20°	17.2	17.0	17.0	17.1	17.0	16.9	17.1	17.0	16.7	16.9	16.7
22.5°	20.2	20.1	20.0	20.1	20.0	19.9	20.1	20.0	19.9	20.0	19.7
25°	23.2	23.3	23.3	23.4	23.3	23.2	23.3	23.3	23.0	23.2	22.9
27.5°	26.4	26.5	26.5	26.7	26.5	26.4	26.5	26.4	26.2	26.5	26.2
30°	29.7	29.8	29.8	30.0	29.8	29.8	29.9	29.8	29.6	29.9	29.5
32.5°	32.8	33.0	33.1	33.2	33.1	33.1	33.0	33.1	32.8	33.2	32.7
35°	36.3	36.5	36.6	36.6	36.6	36.5	36.6	36.5	36.4	36.6	36.1
37.5°	39.6	39.9	40.1	40.0	40.0	40.0	40.0	40.0	39.8	40.2	39.6
40°	43.0	43.2	43.3	43.4	43.4	43.3	43.5	43.4	43.2	43.5	42.9
42.5°	46.2	46.6	46.7	46.8	46.8	46.8	46.7	46.9	46.7	47.0	46.3
45°	49.4	49.8	49.9	50.0	50.0	49.9	49.9	50.0	49.8	50.2	49.4
47.5°	52.1	52.4	52.4	52.5	52.5	52.6	52.5	52.6	52.3	52.7	51.8
50°	53.8	54.2	54.2	54.3	54.3	54.3	54.2	54.3	54.0	54.5	53.7
51°	54.3	54.7	54.7	54.8	54.7	54.7	54.7	54.7	54.5	55.0	54.0
52.5°	54.5	54.9	55.0	55.0	55.1	55.1	55.0	55.0	54.8	55.2	54.2
55°	53.3	53.8	53.9	54.0	54.0	53.9	53.9	53.8	53.5	54.0	53.2
57.5°	51.6	52.0	52.1	52.1	52.1	52.1	51.9	51.9	51.7	52.1	51.3
60°	49.4	49.8	49.8	49.8	49.8	49.8	49.6	49.5	49.2	49.6	49.0
62.5°	47.0	47.4	47.4	47.4	47.3	47.2	47.1	46.9	46.6	47.0	46.3
65°	43.6	44.0	44.0	43.9	43.9	43.8	43.7	43.4	43.0	43.3	42.8
67.5°	40.0	40.4	40.4	40.3	40.3	40.2	40.1	39.7	39.4	39.6	39.2
70°	35.6	36.0	36.0	36.0	35.9	35.7	35.6	35.5	35.0	35.4	34.9
72.5°	31.1	31.6	31.6	31.6	31.3	31.4	31.0	31.0	30.5	30.9	30.4
75°	26.6	26.7	26.8	26.6	26.6	26.4	26.2	26.1	25.7	26.1	25.7
77.5°	21.7	21.8	21.8	21.7	21.6	21.4	21.3	21.4	20.9	21.1	20.8
80°	16.4	16.6	16.6	16.6	16.5	16.3	16.1	16.2	15.7	16.0	15.7
82.5°	11.5	11.6	11.6	11.6	11.6	11.5	11.3	11.3	11.1	11.1	10.9
85°	7.0	7.1	7.2	7.3	7.2	7.0	7.0	7.0	6.9	6.9	6.8
87.5°	3.5	3.6	3.6	3.6	3.6	3.6	3.5	3.6	3.5	3.4	3.5
90°	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.5	1.6
92.5°	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
95°	2.3	2.3	2.3	2.3	2.4	2.3	2.4	2.4	2.3	2.4	2.4
97.5°	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8
100°	3.0	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
102.5°	3.3	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
105°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.9
107.5°	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.4	4.5	4.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	4.9	5.0	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
112.5°	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
115°	5.3	5.4	5.4	5.4	5.4	5.5	5.4	5.4	5.4	5.5	5.4
117.5°	5.5	5.5	5.5	5.5	5.5	5.6	5.5	5.6	5.5	5.6	5.5
120°	5.6	5.6	5.6	5.7	5.6	5.7	5.7	5.7	5.6	5.7	5.7
122.5°	6.1	6.2	6.2	6.2	6.1	6.2	6.2	6.2	6.2	6.2	6.2
125°	6.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.7	6.6
127.5°	7.1	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.2	7.2	7.1
130°	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.3
132.5°	7.3	7.4	7.4	7.3	7.3	7.3	7.3	7.2	7.3	7.3	7.4
135°	7.6	7.7	7.7	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.8
137.5°	7.9	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	8.0
140°	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.1	8.1
142.5°	8.3	8.3	8.4	8.4	8.3	8.4	8.4	8.3	8.2	8.3	8.4
145°	8.2	8.3	8.4	8.3	8.3	8.4	8.4	8.3	8.3	8.3	8.4
147.5°	8.1	8.2	8.2	8.2	8.1	8.2	8.1	8.1	8.0	8.0	8.1
150°	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.8	7.7	7.7	7.9
152.5°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.3	7.4	7.5
155°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.5
157.5°	7.8	7.8	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.9
160°	8.9	9.0	9.0	8.9	8.9	9.0	9.0	9.1	9.1	9.1	9.3
162.5°	11.4	11.5	11.4	11.3	11.3	11.4	11.4	11.6	11.7	11.7	11.8
165°	13.4	13.4	13.3	13.3	13.5	13.8	14.0	14.1	14.3	14.3	14.6
167.5°	14.6	14.7	14.6	14.4	14.5	14.8	14.8	14.8	14.9	15.0	15.1
170°	14.8	15.0	14.9	14.5	14.3	14.3	14.3	14.1	14.1	14.0	14.2
172.5°	14.5	14.6	14.3	14.1	13.8	13.8	13.8	13.9	13.8	14.0	14.1
175°	14.7	14.7	14.7	14.9	15.0	15.3	15.1	15.1	15.3	15.3	15.6
177.5°	18.4	18.3	17.8	17.3	16.9	16.5	15.9	15.6	15.3	15.3	15.4
180°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8

(END OF REPORT)