

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: P821147

Luminaire Tested: **TT-D3-830-24VDC-DL-HSS**

Issue Date: 12/2/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P821147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-D3-830-24VDC-DL-HSS  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
3000K, 80 CRI LEDS AND DRIVE LANE DISTRIBUTION WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

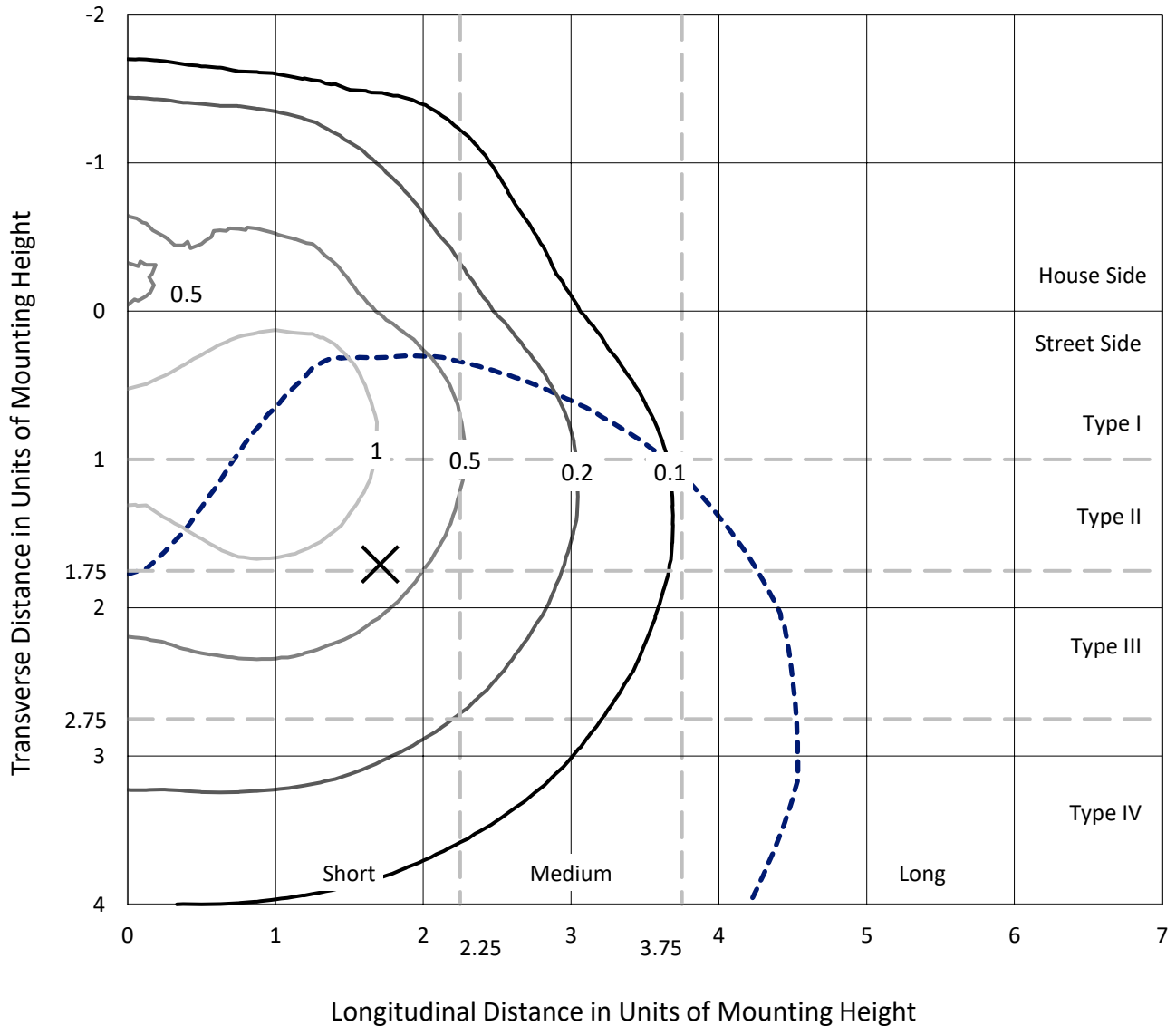
Lumens per Lamp: N/A  
Luminaire Lumens: 4198 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U1 - G3

Input Watts (W): 46  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 FT

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### Iso-Footcandle Lines of Horizontal Illumination

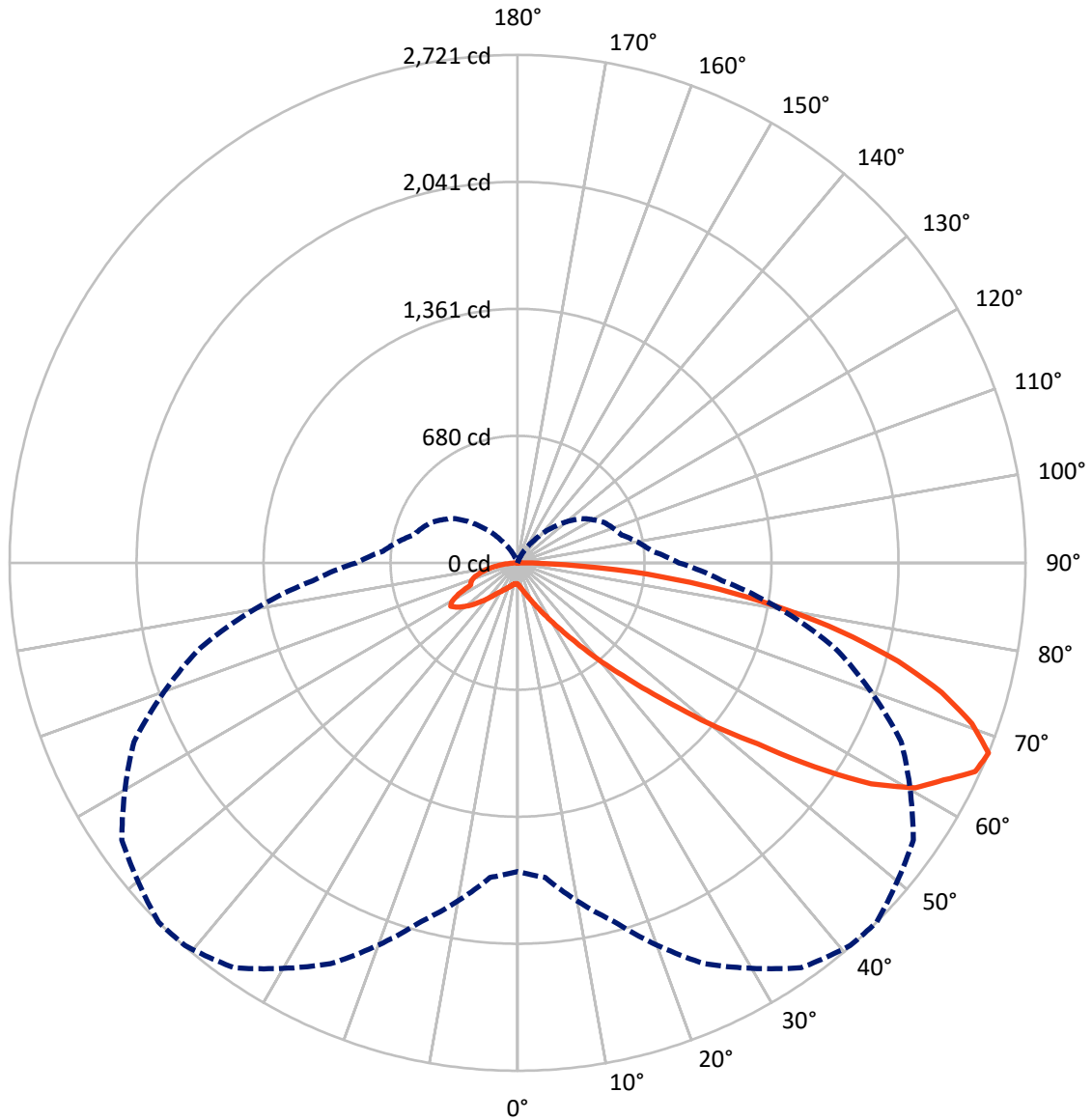
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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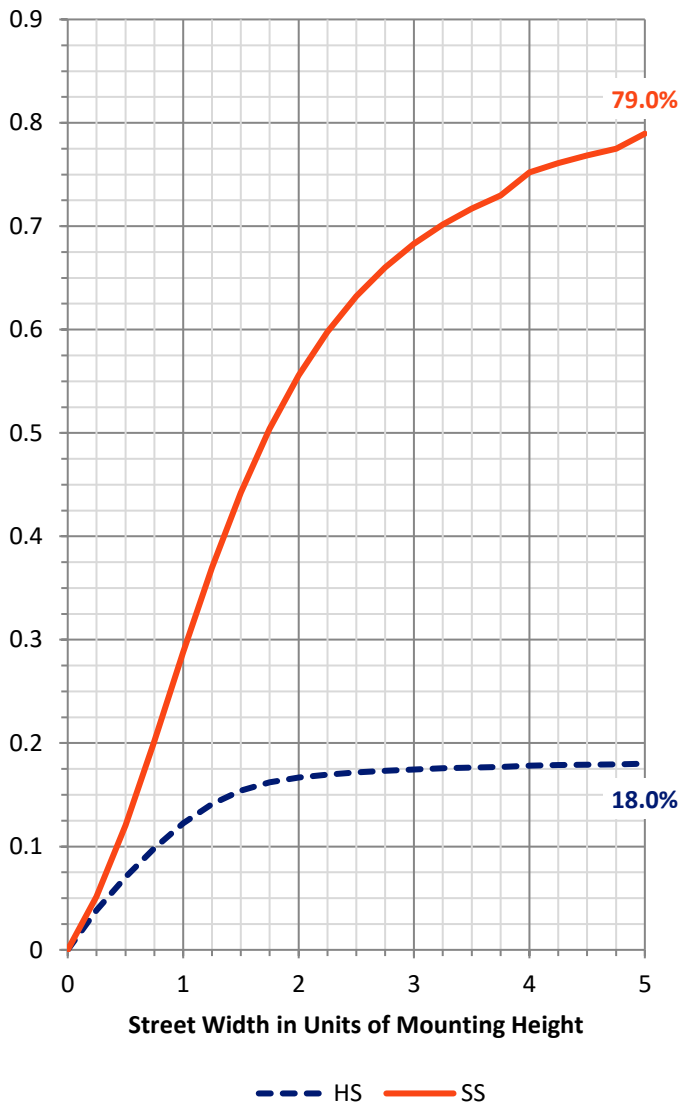
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	762.7	0.9	763.6
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	3425.1	9.4	3434.4
	% Fixture	81.6	0.2	81.8
<b>Total</b>	Lumens	4187.8	10.3	4198.0
	% Fixture	99.8	0.2	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.9	0.3
10°-20°	44.2	1.1
20°-30°	101.8	2.4
30°-40°	217.2	5.2
40°-50°	454.6	10.8
50°-60°	862.4	20.5
60°-70°	1173.7	28.0
70°-80°	1009.1	24.0
80°-90°	312.9	7.5
90°-100°	6.6	0.2
100°-110°	1.9	0.0
110°-120°	0.5	0.0
120°-130°	0.4	0.0
130°-140°	0.3	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	4187.8	99.8
0°-180°	4198.0	100.0

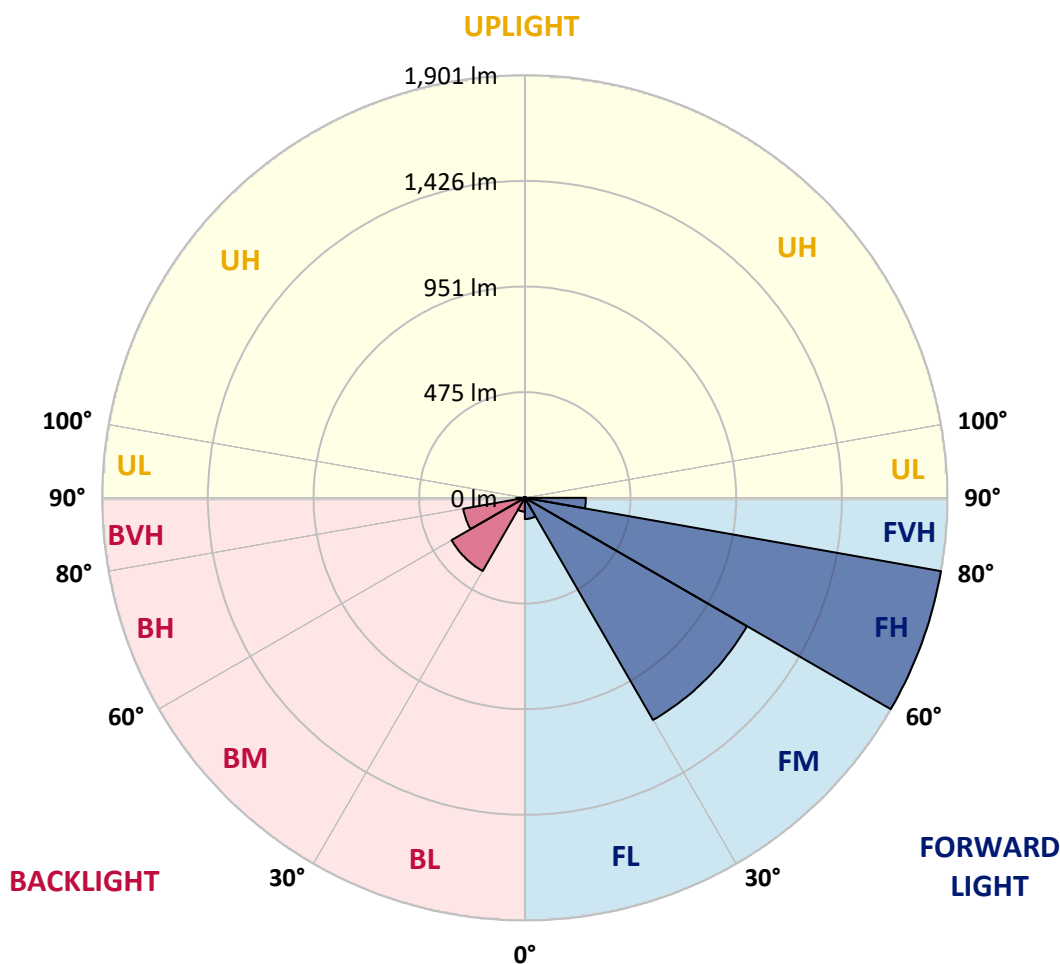


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	95.7	2.3			
FM (30°-60°)	1153.7	27.5			
FH (60°-80°)	1901.1	45.3			G2/5000
FVH (80°-90°)	274.6	6.5			G3/500
BL (0°-30°)	62.2	1.5	B0/110		
BM (30°-60°)	380.5	9.1	B1/1000		
BH (60°-80°)	281.7	6.7	B1/500		G1/500
BVH (80°-90°)	38.3	0.9			G1/100
UL (90°-100°)	6.6	0.2		U1/10	
UH (100°-180°)	3.6	0.1		U1/10	

**BUG Rating: B1-U1-G3**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9
2.5°	124.7	123.8	123.8	122.9	122.9	121.1	121.1	120.2	119.3	118.4	116.6
5°	133.6	132.7	132.7	131.8	130.9	129.1	128.2	126.4	124.7	122.9	121.1
7.5°	144.3	143.4	143.4	142.5	140.7	138.0	137.1	134.5	131.8	129.1	126.4
10°	157.6	156.7	156.7	154.9	153.2	150.5	148.7	145.1	142.5	138.0	133.6
12.5°	171.9	171.0	171.0	169.2	165.6	163.8	162.1	157.6	153.2	147.8	142.5
15°	187.9	187.9	187.9	187.0	183.4	179.9	178.1	172.7	167.4	159.4	152.3
17.5°	208.4	207.5	207.5	205.7	201.2	199.5	196.8	190.6	182.5	173.6	164.7
20°	233.3	232.4	230.6	229.7	225.3	223.5	219.9	212.8	202.1	190.6	178.1
22.5°	258.2	258.2	257.3	258.2	254.7	252.9	248.4	238.6	226.2	209.3	194.1
25°	286.7	287.6	289.4	292.1	287.6	285.8	282.3	269.8	254.7	233.3	211.9
27.5°	322.3	322.3	326.8	331.2	327.7	326.8	321.4	308.1	286.7	260.9	236.0
30°	360.6	361.5	368.6	376.7	374.9	374.9	370.4	355.3	329.5	299.2	264.5
32.5°	405.1	408.7	415.8	424.7	431.0	431.0	429.2	413.2	382.9	341.9	299.2
35°	463.9	457.7	471.0	484.4	497.8	500.4	501.3	486.2	451.5	399.8	341.9
37.5°	514.7	513.8	534.3	557.4	579.7	588.6	591.3	577.0	532.5	464.8	388.2
40°	573.4	578.8	606.4	641.1	678.5	693.7	700.8	684.7	629.5	542.3	441.7
42.5°	634.9	650.9	685.6	738.2	795.2	817.4	825.4	810.3	745.3	639.3	509.3
45°	707.0	729.3	775.6	850.4	925.2	958.1	975.9	970.6	903.8	772.0	596.6
47.5°	796.1	812.1	875.3	975.9	1081.9	1136.2	1161.1	1176.3	1081.0	909.1	673.2
50°	896.7	899.3	986.6	1113.9	1268.9	1341.0	1384.6	1377.5	1264.4	1066.7	770.2
52.5°	998.2	995.5	1109.5	1282.2	1485.3	1579.6	1609.0	1638.4	1527.1	1307.2	926.1
55°	1113.9	1108.6	1252.0	1471.0	1723.0	1847.7	1930.5	1971.4	1796.0	1465.7	993.7
57.5°	1210.1	1227.0	1406.9	1670.5	2022.2	2178.9	2233.2	2211.0	1943.8	1545.8	1026.7
60°	1332.1	1357.0	1561.8	1931.4	2281.3	2397.9	2447.8	2346.3	2038.2	1606.3	1049.8
62.5°	1447.0	1479.0	1731.9	2143.3	2443.4	2550.2	2562.7	2452.3	2170.9	1725.7	1117.5
65°	1554.7	1591.2	1901.1	2268.8	2584.9	2674.0	2695.4	2608.1	2311.6	1796.0	1144.2
67.5°	1653.5	1691.8	1988.3	2369.5	2648.2	2716.7	2721.2	2588.5	2267.9	1759.5	1101.5
70°	1729.2	1746.1	2030.2	2366.8	2573.4	2600.1	2582.3	2448.7	2165.5	1684.7	1040.0
72.5°	1744.4	1756.8	1972.3	2235.0	2365.9	2390.8	2376.6	2259.0	2004.4	1551.1	940.3
75°	1667.8	1670.5	1816.5	1998.1	2093.4	2123.7	2105.0	1996.4	1762.2	1362.4	809.4
77.5°	1467.4	1472.8	1560.9	1682.9	1763.1	1788.9	1774.6	1674.9	1476.3	1144.2	669.6
80°	1162.9	1173.6	1236.8	1321.4	1394.4	1421.1	1404.2	1324.1	1162.0	899.3	522.7
82.5°	792.5	805.8	863.7	934.1	998.2	1024.0	1009.8	959.0	837.9	648.2	373.1
85°	400.7	414.9	474.6	540.5	596.6	624.2	619.7	598.4	515.6	399.8	225.3
87.5°	63.2	69.5	94.4	125.6	160.3	186.1	170.1	168.3	133.6	106.9	54.3
90°	25.8	25.8	24.9	24.0	21.4	19.6	18.7	15.1	11.6	7.1	2.7
92.5°	23.2	23.2	22.3	20.5	18.7	17.8	16.0	13.4	9.8	6.2	2.7
95°	18.7	18.7	17.8	16.9	15.1	14.2	12.5	10.7	8.0	5.3	2.7
97.5°	14.2	14.2	13.4	12.5	11.6	9.8	9.8	8.0	5.3	3.6	1.8
100°	10.7	10.7	9.8	8.9	8.0	7.1	7.1	5.3	3.6	2.7	1.8
102.5°	7.1	7.1	7.1	6.2	5.3	5.3	4.5	3.6	2.7	1.8	1.8
105°	4.5	4.5	4.5	4.5	3.6	2.7	2.7	1.8	1.8	1.8	1.8
107.5°	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
110°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
112.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
115°	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
117.5°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
120°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
122.5°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
125°	0.0	0.0	0.0	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9
127.5°	0.0	0.0	0.0	0.9	0.0	0.0	0.9	0.9	0.9	0.9	0.9
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
142.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
145°	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
147.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
175°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9
2.5°	116.6	115.8	114.0	113.1	111.3	111.3	110.4	109.5	109.5	109.5	109.5
5°	119.3	118.4	116.6	114.9	113.1	111.3	110.4	109.5	109.5	109.5	108.6
7.5°	124.7	122.9	120.2	117.5	114.9	113.1	112.2	111.3	110.4	110.4	110.4
10°	130.9	129.1	124.7	122.0	118.4	115.8	114.9	114.0	113.1	113.1	113.1
12.5°	138.9	136.2	130.9	126.4	122.9	120.2	118.4	117.5	117.5	116.6	117.5
15°	148.7	145.1	138.0	132.7	128.2	125.6	123.8	122.9	122.9	122.9	122.0
17.5°	159.4	154.9	146.0	139.8	134.5	131.8	130.0	129.1	129.1	129.1	129.1
20°	171.9	165.6	155.8	147.8	142.5	138.9	137.1	137.1	136.2	137.1	137.1
22.5°	185.2	178.1	165.6	156.7	149.6	146.0	144.3	144.3	144.3	145.1	146.0
25°	201.2	192.3	177.2	165.6	157.6	154.0	152.3	153.2	153.2	154.0	154.0
27.5°	222.6	209.3	190.6	176.3	167.4	163.0	161.2	162.1	163.0	163.0	163.0
30°	246.7	230.6	204.8	189.7	179.0	173.6	171.9	172.7	173.6	175.4	174.5
32.5°	276.0	256.4	226.2	204.8	193.2	187.0	185.2	184.3	186.1	187.9	187.9
35°	311.7	286.7	251.1	226.2	209.3	201.2	199.5	198.6	199.5	201.2	203.0
37.5°	349.9	319.7	276.0	250.2	231.5	222.6	218.2	214.6	215.5	216.4	219.0
40°	393.6	356.2	304.5	273.4	256.4	245.8	239.5	234.2	236.0	236.0	236.9
42.5°	448.8	401.6	340.1	301.0	283.2	271.6	261.8	255.6	252.0	252.9	249.3
45°	520.9	462.1	384.7	340.1	315.2	297.4	285.8	273.4	264.5	266.2	260.9
47.5°	580.6	510.2	426.5	377.5	350.8	328.6	304.5	286.7	274.3	272.5	268.9
50°	653.6	569.0	474.6	418.5	390.0	356.2	327.7	297.4	276.9	271.6	272.5
52.5°	776.5	672.3	543.2	473.7	423.8	383.8	340.1	298.3	270.7	262.7	265.4
55°	821.0	707.0	578.8	519.1	470.2	407.8	345.5	288.5	252.9	245.8	246.7
57.5°	830.8	707.0	581.5	533.4	492.4	427.4	342.8	266.2	219.0	212.8	211.9
60°	836.1	702.6	571.7	522.7	478.2	408.7	308.1	214.6	168.3	163.8	161.2
62.5°	886.0	740.0	581.5	514.7	451.5	358.8	234.2	137.1	93.5	92.6	90.8
65°	901.1	753.3	593.9	520.0	422.1	278.7	138.9	46.3	9.8	10.7	8.9
67.5°	863.7	723.0	576.1	512.0	413.2	271.6	133.6	39.2	0.0	0.0	0.0
70°	812.1	679.4	544.9	484.4	394.5	260.9	130.9	39.2	0.0	0.0	0.0
72.5°	730.2	617.1	495.1	447.0	362.4	239.5	122.0	37.4	0.0	0.0	0.0
75°	634.0	536.9	433.6	396.2	321.4	210.1	109.5	33.8	0.0	0.0	0.0
77.5°	530.7	447.9	362.4	333.9	271.6	179.0	92.6	28.5	0.0	0.0	0.0
80°	416.7	354.4	285.8	266.2	214.6	142.5	73.9	22.3	0.0	0.0	0.0
82.5°	300.1	257.3	211.0	195.0	157.6	103.3	53.4	15.1	0.0	0.0	0.0
85°	185.2	161.2	136.2	126.4	99.7	64.1	32.1	8.0	0.0	0.0	0.0
87.5°	55.2	53.4	48.1	47.2	33.8	19.6	7.1	0.9	0.0	0.0	0.0
90°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)