

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: P198368

Luminaire Tested: **TT-C3-LED-E1-DL-CG-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198368
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C3-LED-E1-DL-CG-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4816.3 lumens
Efficiency: N/A
Efficacy: 57.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U4 - G2

Input Watts (W): 83.9
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: 25 FT



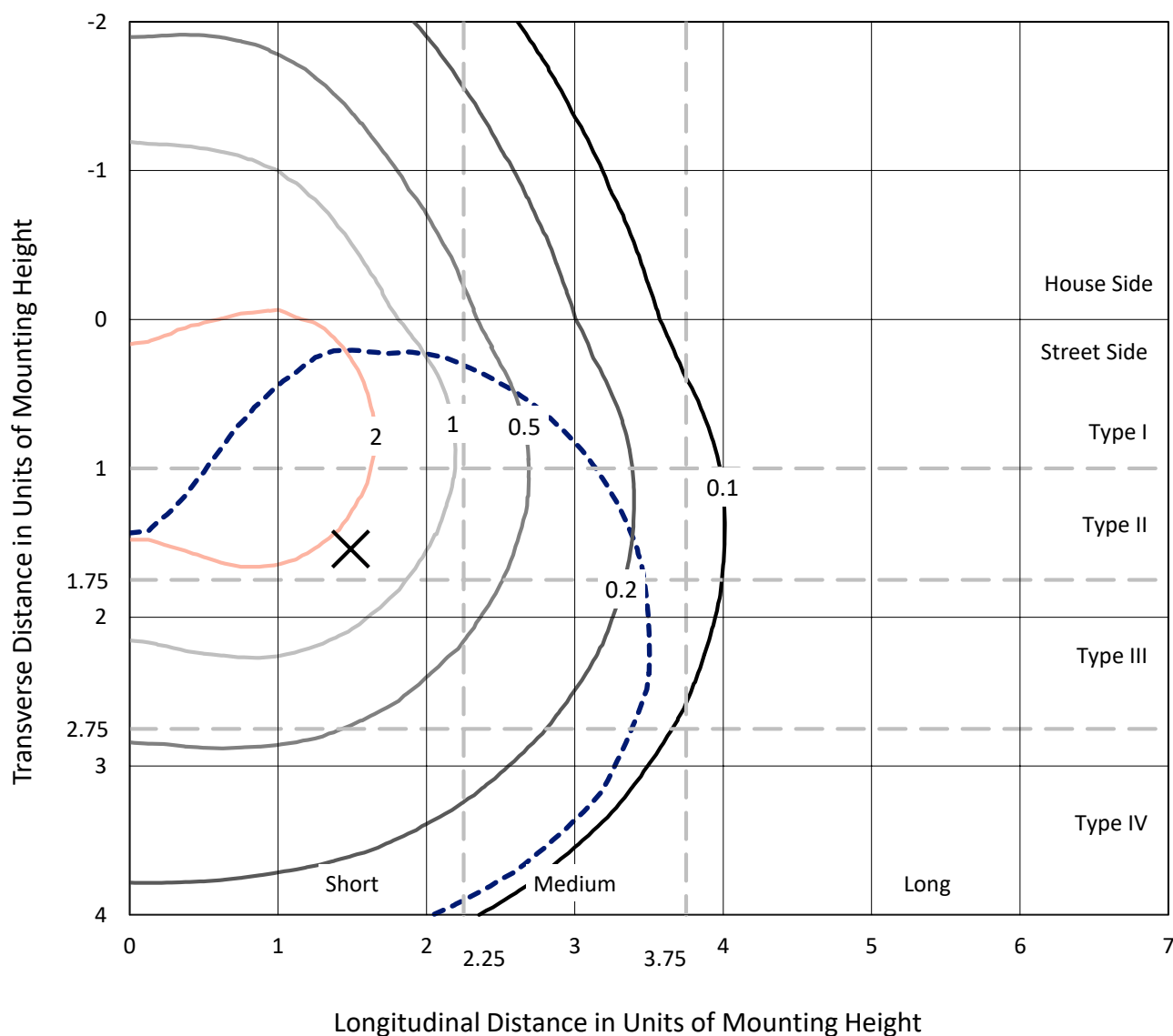
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

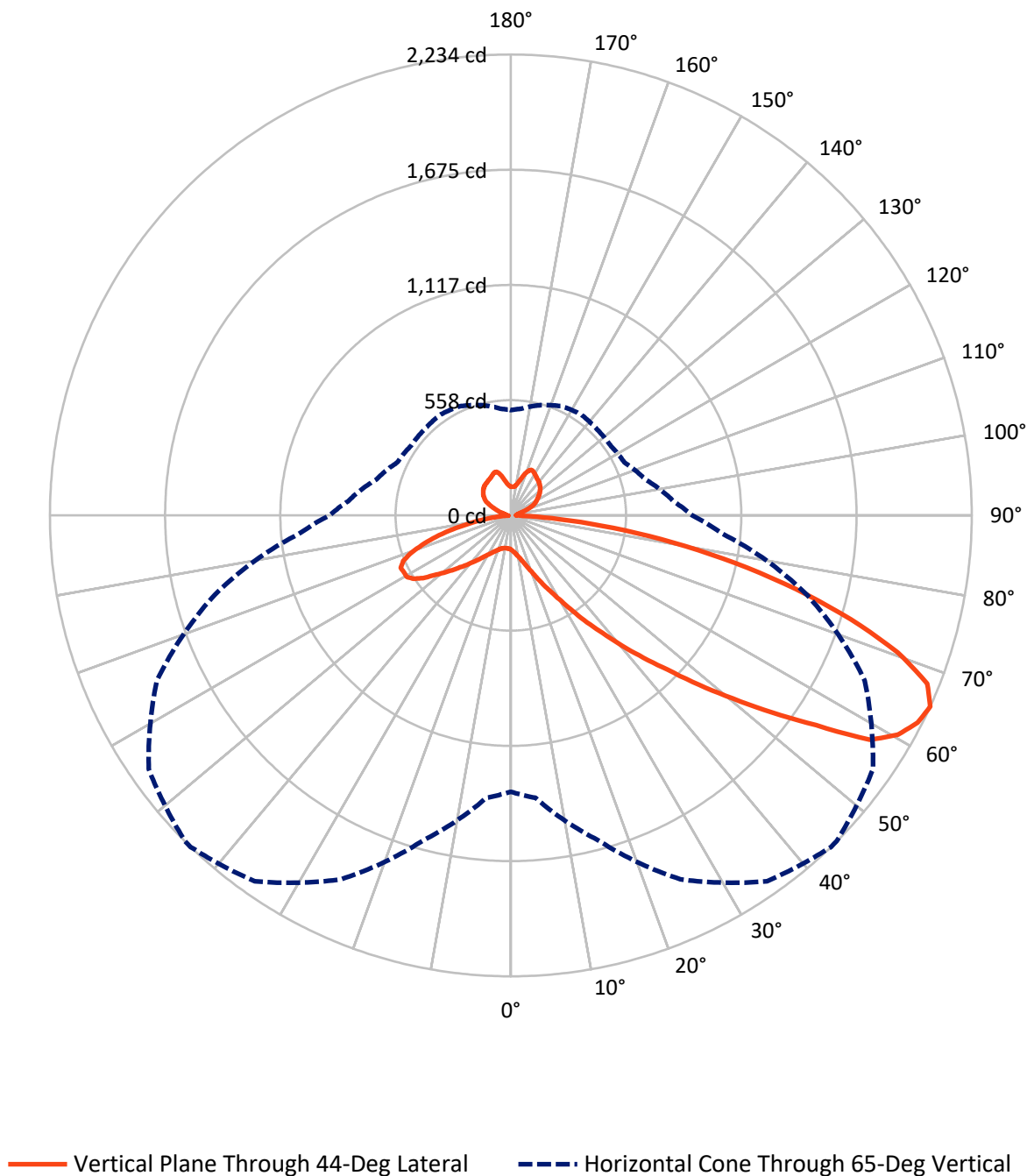


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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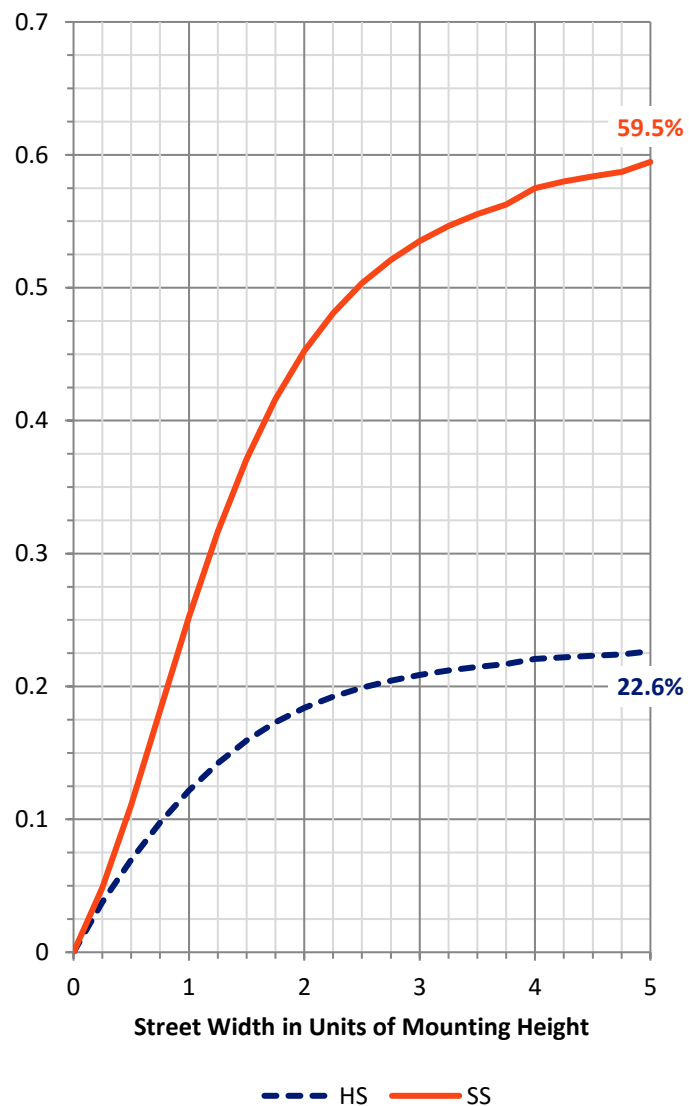
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1102.3	387.3	1489.7
	% Fixture	22.9	8.0	30.9
Street Side	Lumens	2914.0	412.6	3326.6
	% Fixture	60.5	8.6	69.1
Total	Lumens	4016.3	800.0	4816.3
	% Fixture	83.4	16.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.6	0.3
10°-20°	58.4	1.2
20°-30°	130.9	2.7
30°-40°	267.1	5.5
40°-50°	513.6	10.7
50°-60°	892.2	18.5
60°-70°	1142.7	23.7
70°-80°	818.3	17.0
80°-90°	176.4	3.7
90°-100°	36.3	0.8
100°-110°	55.2	1.1
110°-120°	110.8	2.3
120°-130°	144.2	3.0
130°-140°	148.0	3.1
140°-150°	133.4	2.8
150°-160°	102.6	2.1
160°-170°	55.1	1.1
170°-180°	14.3	0.3
0°-90°	4016.3	83.4
0°-180°	4816.3	100.0

Coefficient of Utilization



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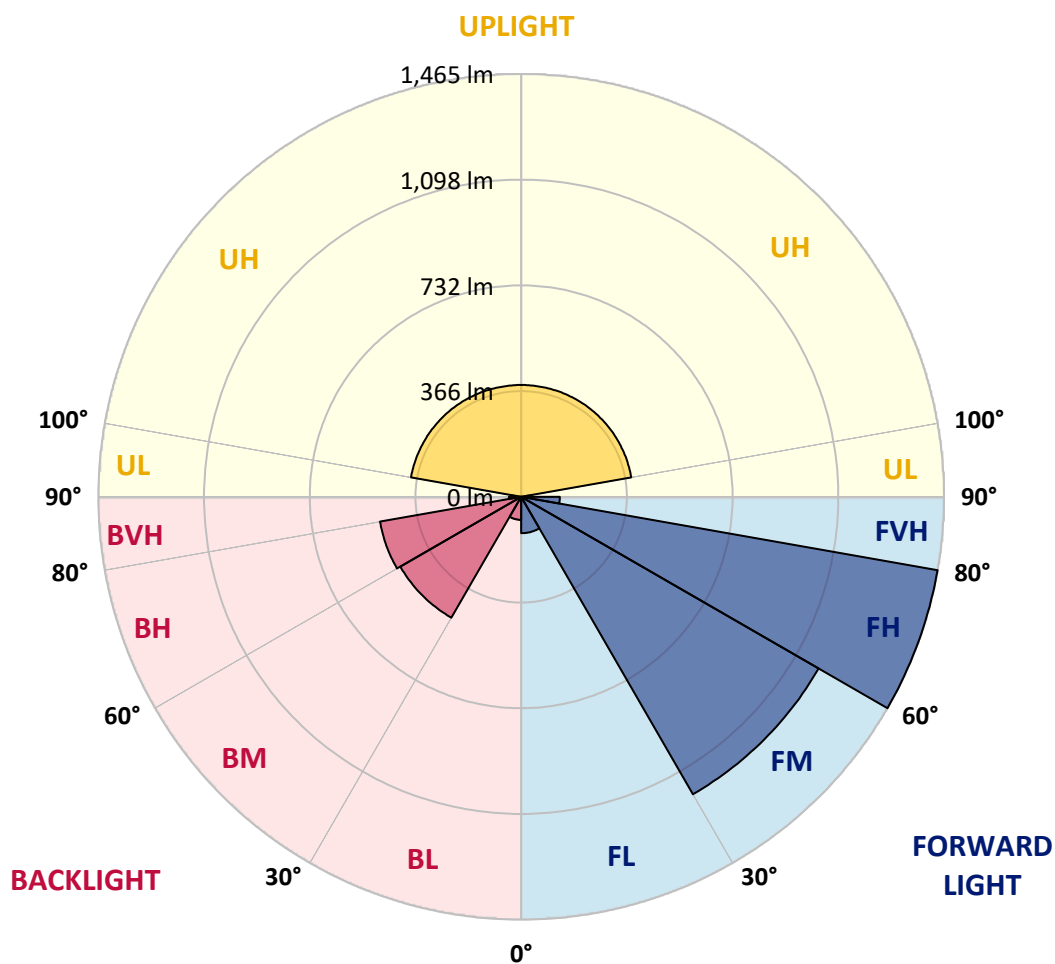
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	126.1	2.6			
FM	(30°-60°)	1189.6	24.7			
FH	(60°-80°)	1464.5	30.4			G1/1800
FVH	(80°-90°)	133.8	2.8			G2/225
BL	(0°-30°)	79.9	1.7	B0/110		
BM	(30°-60°)	483.4	10.0	B1/1000		
BH	(60°-80°)	496.5	10.3	B1/500		G1/500
BVH	(80°-90°)	42.6	0.9			G1/100
UL	(90°-100°)	36.3	0.8		U2/50	
UH	(100°-180°)	387.3	8.0		U3/500	

BUG Rating: B1-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2
2.5°	174.2	174.2	174.2	173.5	172.7	172.0	172.0	171.2	170.4	169.7	168.2
5°	184.8	184.0	184.0	182.5	181.8	180.2	180.2	178.7	176.5	174.2	172.0
7.5°	196.1	196.8	196.1	194.6	192.3	190.8	190.1	187.0	184.0	180.2	176.5
10°	209.7	210.4	210.4	208.9	206.6	202.9	202.9	198.3	193.8	189.3	182.5
12.5°	229.3	228.5	227.8	227.8	223.2	218.7	220.2	214.2	206.6	199.9	191.6
15°	247.4	248.9	250.4	246.6	243.6	239.1	238.3	230.8	222.5	212.7	202.1
17.5°	273.8	275.3	274.5	273.0	269.2	264.0	262.5	253.4	242.1	228.5	214.2
20°	307.7	308.5	305.4	303.9	300.9	294.1	291.9	281.3	266.2	247.4	230.0
22.5°	345.4	343.2	342.4	340.9	340.1	332.6	331.8	316.0	294.1	273.0	248.1
25°	377.8	380.1	381.6	383.9	383.1	375.6	375.6	357.5	331.1	302.4	270.7
27.5°	415.6	419.3	423.8	429.1	428.4	423.1	426.1	408.8	373.3	338.6	297.9
30°	456.3	462.3	469.9	482.7	486.4	481.2	481.2	459.3	424.6	377.8	328.1
32.5°	510.6	513.6	520.4	540.7	552.1	552.1	551.3	527.2	484.9	426.1	364.3
35°	567.1	567.9	586.0	610.9	625.2	636.5	631.2	607.9	560.4	488.0	410.3
37.5°	625.2	626.0	651.6	681.0	713.5	722.5	727.0	705.9	644.8	556.6	460.8
40°	683.3	693.1	723.3	764.0	812.2	830.3	828.1	809.2	736.1	632.0	515.9
42.5°	742.1	762.5	793.4	856.0	913.3	942.7	944.2	927.6	850.7	730.8	587.5
45°	812.2	825.1	872.6	945.0	1027.2	1065.7	1069.4	1061.9	989.5	851.5	673.5
47.5°	885.4	897.5	954.8	1046.0	1148.6	1226.3	1233.1	1226.3	1136.5	953.3	750.4
50°	965.3	969.9	1038.5	1160.7	1309.3	1394.5	1399.0	1402.0	1280.6	1084.5	825.1
52.5°	1040.0	1041.5	1129.8	1289.6	1479.7	1586.0	1591.3	1585.3	1489.5	1248.9	965.3
55°	1113.9	1115.4	1227.0	1437.5	1663.0	1794.9	1828.1	1831.1	1657.7	1354.5	1003.1
57.5°	1182.6	1189.3	1341.7	1584.5	1869.6	2051.4	2049.1	1998.6	1756.5	1394.5	1011.4
60°	1244.4	1266.3	1451.0	1749.7	2037.0	2156.9	2169.0	2058.2	1791.2	1411.8	1004.6
62.5°	1297.2	1321.3	1554.4	1880.9	2141.9	2212.8	2208.2	2082.3	1840.2	1472.2	1049.1
65°	1339.4	1374.1	1628.3	1945.8	2164.5	2233.9	2233.1	2142.6	1892.2	1485.0	1031.0
67.5°	1362.8	1416.3	1639.6	1947.3	2147.1	2176.6	2166.0	2053.6	1794.9	1402.8	943.5
70°	1375.6	1410.3	1612.4	1861.3	1997.8	1989.5	1991.8	1855.3	1627.5	1265.5	838.6
72.5°	1328.9	1357.5	1499.3	1675.8	1765.5	1723.3	1742.9	1617.7	1414.8	1079.2	706.7
75°	1212.7	1226.3	1294.9	1407.3	1455.6	1426.9	1426.9	1336.4	1141.8	885.4	570.9
77.5°	1015.1	1019.6	1046.0	1106.4	1120.0	1111.7	1109.4	1031.7	876.4	676.5	426.9
80°	725.5	742.1	753.4	779.8	808.5	796.4	780.6	718.0	613.1	463.1	294.1
82.5°	450.2	451.8	463.1	480.4	484.9	500.8	498.5	448.7	370.3	276.8	172.0
85°	210.4	206.6	217.2	229.3	236.1	235.3	240.6	216.4	171.2	126.7	78.4
87.5°	33.2	46.8	49.8	49.0	54.3	55.1	57.3	52.0	35.4	24.9	18.9
90°	36.0	36.0	36.0	34.0	29.0	26.2	26.0	28.0	32.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	27.0	28.0	32.0	35.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.2	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.2	33.0	33.0	34.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	36.0	38.0	38.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	42.0	43.0	44.0	42.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	51.8	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	67.6	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	86.8	87.0	84.0	84.0	78.0	74.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.2	107.0	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.4	124.0	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.4	136.0	138.0	141.0	139.0	133.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	147.0	150.0	153.0	148.0	145.0
122.5°	161.0	162.0	164.0	154.0	155.0	157.6	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	167.6	168.0	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	177.8	178.0	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.2	186.0	183.0	183.0	184.0	171.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	195.0	190.0	192.0	192.0	179.0
135°	210.0	210.0	209.0	192.0	199.0	201.2	201.0	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	207.8	208.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	212.4	213.0	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	216.8	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	221.4	223.0	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	227.2	229.0	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	233.4	235.0	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	239.6	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	242.2	243.0	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	234.4	235.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	218.4	219.0	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	197.4	198.0	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	176.4	177.0	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	158.6	159.0	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	146.8	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	140.8	141.0	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	138.8	139.0	138.0	141.0	141.0	143.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	139.0	138.0	140.0	140.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2
2.5°	167.4	167.4	165.9	164.4	162.9	162.1	161.4	160.6	160.6	159.9	159.9
5°	171.2	169.7	167.4	165.2	162.9	161.4	159.9	159.1	157.6	156.9	156.9
7.5°	174.2	172.7	168.9	165.9	162.9	160.6	158.4	156.9	156.1	155.4	155.4
10°	180.2	177.2	172.7	167.4	163.7	160.6	158.4	156.9	156.1	155.4	155.4
12.5°	188.5	184.0	176.5	171.2	165.9	162.1	159.9	158.4	156.9	156.9	156.1
15°	197.6	192.3	183.3	175.0	168.9	165.2	162.1	161.4	159.9	159.9	159.9
17.5°	208.2	202.1	190.8	181.0	174.2	169.7	166.7	165.2	164.4	165.2	165.9
20°	221.7	213.4	199.1	188.5	180.2	175.7	173.5	171.2	171.2	172.7	172.7
22.5°	237.6	227.8	210.4	197.6	189.3	183.3	181.8	180.2	179.5	181.0	181.0
25°	254.2	242.8	222.5	208.2	198.3	193.1	191.6	190.1	190.8	191.6	189.3
27.5°	279.8	264.0	237.6	221.0	209.7	204.4	202.1	201.4	202.1	202.9	201.4
30°	303.9	285.1	255.7	236.1	221.7	216.4	214.2	214.2	214.9	214.9	214.9
32.5°	337.1	313.7	276.0	252.6	238.3	231.5	230.8	230.8	229.3	230.0	229.3
35°	376.3	348.4	303.9	275.3	258.7	251.1	248.9	247.4	247.4	247.4	247.4
37.5°	418.6	384.6	332.6	300.9	282.1	273.0	268.5	266.2	267.0	267.0	265.5
40°	466.1	426.9	366.5	327.3	310.0	296.4	291.1	288.9	288.1	286.6	282.8
42.5°	529.4	479.7	408.0	361.3	335.6	325.8	316.0	311.5	307.7	307.0	300.9
45°	604.1	550.5	461.6	409.5	375.6	353.7	343.9	336.4	329.6	327.3	322.8
47.5°	665.9	601.1	509.1	451.0	413.3	390.7	374.8	363.5	354.5	349.2	350.7
50°	735.3	662.9	563.4	490.2	453.3	429.1	414.0	395.2	381.6	373.3	376.3
52.5°	849.2	768.5	638.8	558.1	494.7	470.6	451.0	429.1	411.0	399.7	405.7
55°	880.9	796.4	675.0	601.1	552.1	525.7	496.2	469.1	443.5	428.4	428.4
57.5°	879.4	794.1	678.0	613.1	584.5	565.6	543.8	509.8	476.6	454.8	453.3
60°	868.1	782.8	670.5	604.9	583.0	586.8	577.7	549.0	509.8	479.7	475.1
62.5°	897.5	810.7	690.1	613.1	581.5	585.2	592.8	576.2	537.7	500.0	495.5
65°	878.6	791.1	674.2	607.1	589.8	590.5	595.8	583.7	552.8	518.1	510.6
67.5°	801.7	724.8	620.7	562.6	551.3	564.9	581.5	577.7	551.3	527.9	518.9
70°	704.4	636.5	547.5	499.3	491.0	510.6	538.5	543.8	536.2	521.1	518.1
72.5°	596.6	537.0	461.6	425.4	422.3	437.4	465.3	483.4	488.7	495.5	495.5
75°	478.9	432.1	367.3	342.4	342.4	359.0	381.6	405.0	419.3	437.4	442.7
77.5°	363.5	322.8	276.8	255.7	255.7	270.7	288.1	307.0	331.1	356.0	352.2
80°	248.9	222.5	189.3	178.7	176.5	184.8	199.9	212.7	233.8	250.4	260.2
82.5°	142.5	133.5	113.9	104.8	104.1	114.6	125.2	126.7	141.0	150.8	153.9
85°	67.9	59.6	55.8	49.8	50.5	52.8	56.6	59.6	63.4	67.1	67.1
87.5°	15.1	14.3	12.8	13.6	13.6	12.1	13.6	12.8	14.3	15.1	13.6
90°	34.0	34.0	34.0	32.0	27.0	21.0	25.0	30.0	33.0	34.0	34.0
92.5°	36.0	35.0	33.0	31.0	27.0	23.0	25.0	29.0	34.0	36.0	36.0
95°	38.0	38.0	35.0	33.0	29.0	26.0	27.0	31.0	34.0	35.0	36.0
97.5°	36.0	35.0	35.0	34.0	30.0	25.0	26.0	30.0	33.0	35.0	35.0
100°	37.0	37.0	38.0	38.0	33.0	27.0	28.0	32.0	35.0	36.0	36.0
102.5°	41.0	42.0	43.0	45.0	39.0	32.0	33.0	35.0	38.0	40.0	41.0
105°	49.0	49.0	52.0	54.0	48.0	39.0	38.0	41.0	44.0	48.0	49.0
107.5°	60.0	61.0	65.0	65.0	58.0	50.0	47.0	50.0	54.0	60.0	61.0
110°	75.0	77.0	78.0	75.0	71.0	65.0	60.0	62.0	67.0	73.0	74.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	94.0	94.0	91.0	86.0	84.0	82.0	77.0	80.0	85.0	87.0	87.0
115°	113.0	111.0	104.0	100.0	99.0	102.0	99.0	103.0	106.0	102.0	102.0
117.5°	129.0	128.0	121.0	117.0	116.0	120.0	121.0	125.0	125.0	120.0	120.0
120°	142.0	142.0	137.0	134.0	134.0	137.0	137.0	139.0	139.0	134.0	136.0
122.5°	150.0	153.0	151.0	148.0	149.0	149.0	145.0	148.0	149.0	145.0	146.0
125°	158.0	162.0	162.0	159.0	160.0	159.0	149.0	154.0	156.0	154.0	154.0
127.5°	163.0	169.0	170.0	168.0	168.0	169.0	154.0	158.0	163.0	160.0	161.0
130°	169.0	176.0	178.0	174.0	175.0	175.0	159.0	164.0	169.0	164.0	167.0
132.5°	176.0	182.0	186.0	181.0	183.0	181.0	165.0	171.0	176.0	171.0	174.0
135°	184.0	190.0	195.0	190.0	191.0	187.0	170.0	177.0	184.0	179.0	179.0
137.5°	190.0	196.0	204.0	200.0	199.0	191.0	175.0	182.0	192.0	187.0	187.0
140°	195.0	201.0	213.0	212.0	206.0	195.0	180.0	186.0	200.0	195.0	196.0
142.5°	198.0	204.0	220.0	222.0	212.0	197.0	184.0	190.0	205.0	204.0	205.0
145°	202.0	208.0	225.0	230.0	216.0	199.0	187.0	193.0	208.0	211.0	214.0
147.5°	206.0	212.0	230.0	236.0	219.0	202.0	191.0	195.0	212.0	220.0	225.0
150°	211.0	216.0	231.0	235.0	219.0	205.0	194.0	199.0	215.0	227.0	233.0
152.5°	216.0	220.0	229.0	230.0	220.0	208.0	201.0	205.0	219.0	232.0	239.0
155°	219.0	221.0	224.0	222.0	220.0	213.0	208.0	212.0	224.0	234.0	240.0
157.5°	219.0	219.0	216.0	213.0	216.0	219.0	215.0	220.0	229.0	232.0	235.0
160°	215.0	214.0	210.0	208.0	213.0	223.0	224.0	228.0	233.0	229.0	232.0
162.5°	207.0	207.0	204.0	204.0	209.0	221.0	227.0	231.0	230.0	224.0	226.0
165°	192.0	194.0	196.0	198.0	203.0	212.0	216.0	219.0	220.0	215.0	217.0
167.5°	174.0	177.0	181.0	184.0	189.0	195.0	196.0	199.0	200.0	197.0	200.0
170°	160.0	163.0	166.0	168.0	172.0	177.0	178.0	180.0	181.0	178.0	181.0
172.5°	151.0	153.0	155.0	156.0	159.0	162.0	162.0	164.0	165.0	163.0	166.0
175°	144.0	146.0	147.0	148.0	149.0	151.0	151.0	152.0	153.0	151.0	153.0
177.5°	141.0	142.0	142.0	142.0	143.0	144.0	143.0	144.0	145.0	143.0	145.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)