

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: P198374

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198374
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-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4532.2 lumens
Efficiency: N/A
Efficacy: 54.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - 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



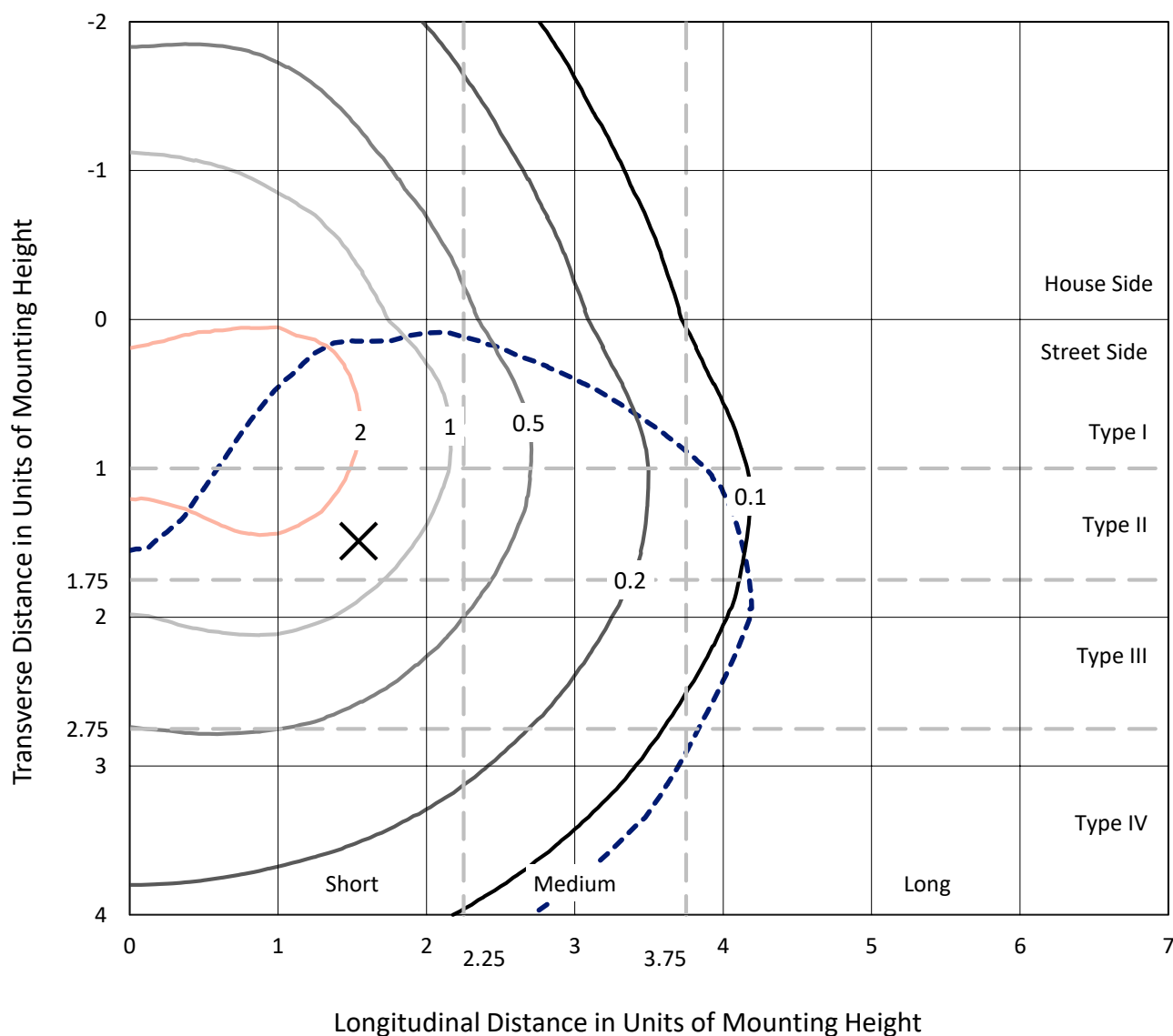
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

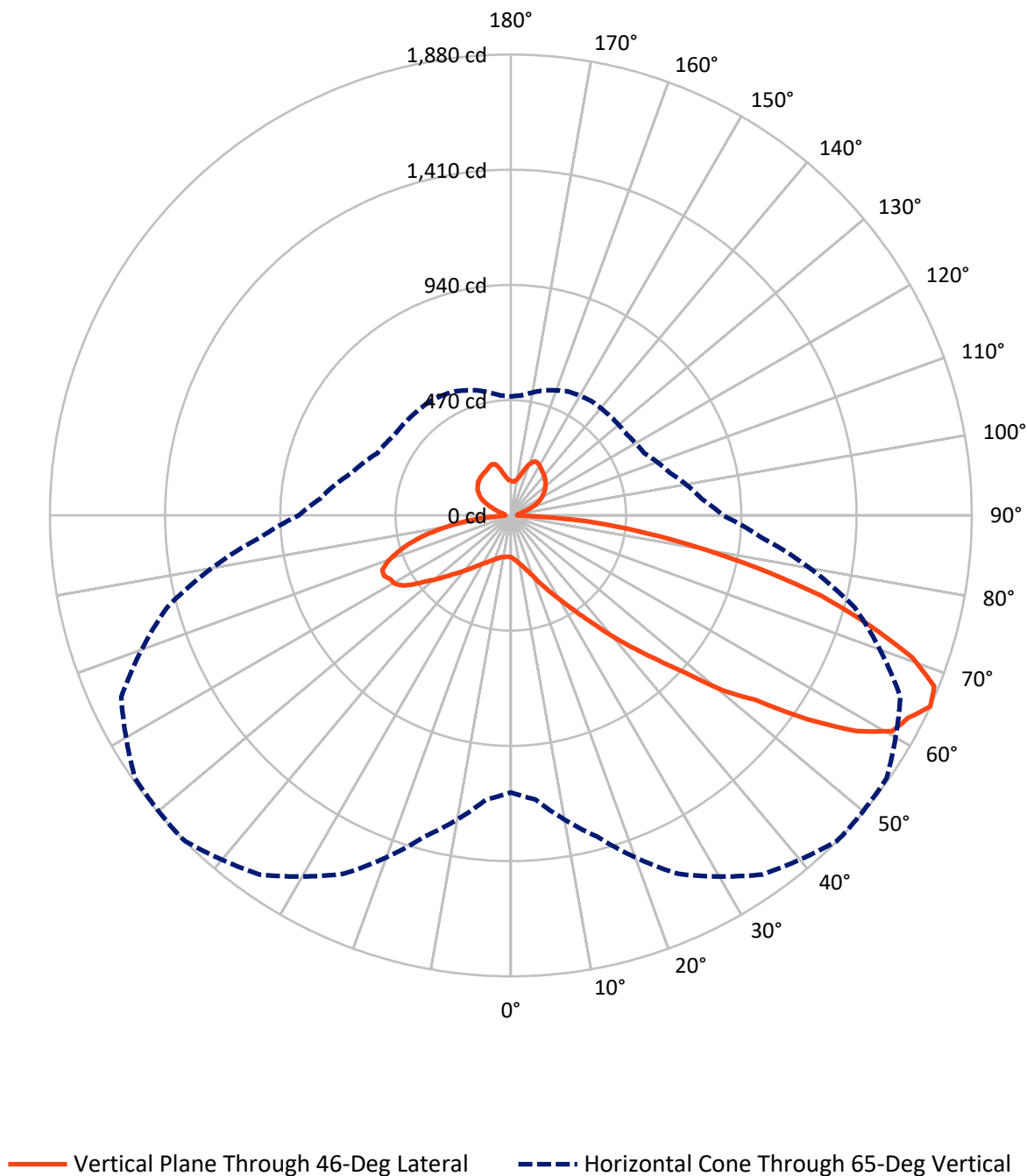


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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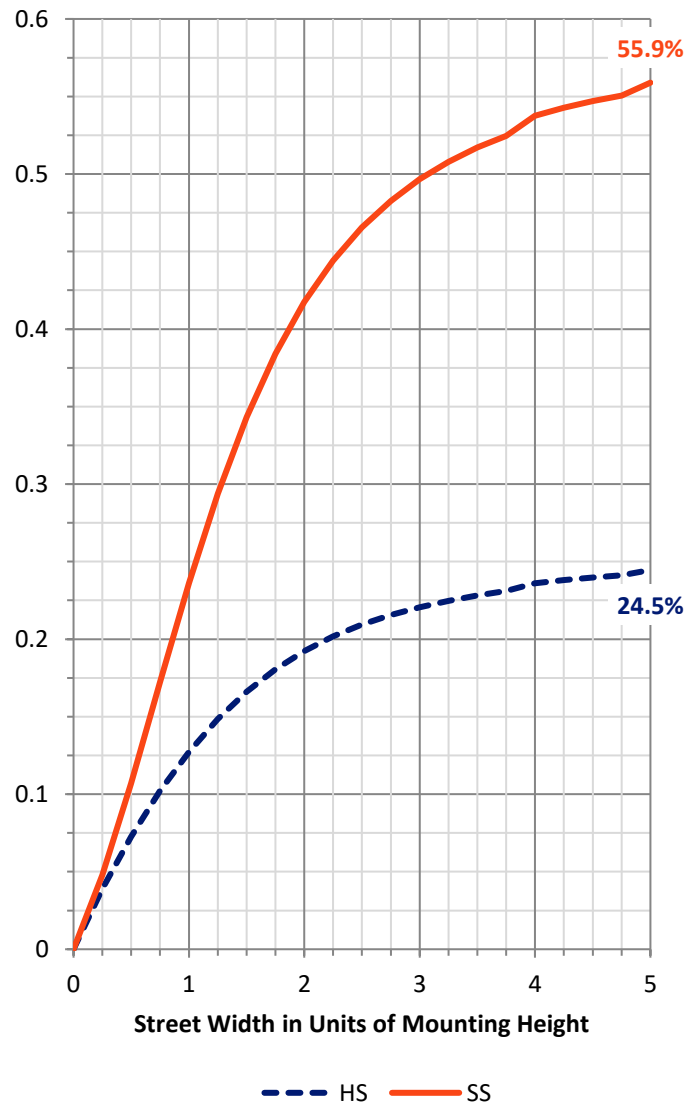
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1134.1	387.3	1521.4
	% Fixture	25.0	8.5	33.6
Street Side	Lumens	2598.1	412.6	3010.8
	% Fixture	57.3	9.1	66.4
Total	Lumens	3732.3	799.9	4532.2
	% Fixture	82.3	17.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	0.4
10°-20°	58.5	1.3
20°-30°	123.4	2.7
30°-40°	234.5	5.2
40°-50°	433.1	9.6
50°-60°	759.2	16.8
60°-70°	1030.1	22.7
70°-80°	837.5	18.5
80°-90°	238.9	5.3
90°-100°	36.3	0.8
100°-110°	55.2	1.2
110°-120°	110.8	2.4
120°-130°	144.2	3.2
130°-140°	147.9	3.3
140°-150°	133.4	2.9
150°-160°	102.6	2.3
160°-170°	55.1	1.2
170°-180°	14.3	0.3
0°-90°	3732.3	82.3
0°-180°	4532.2	100.0

Coefficient of Utilization



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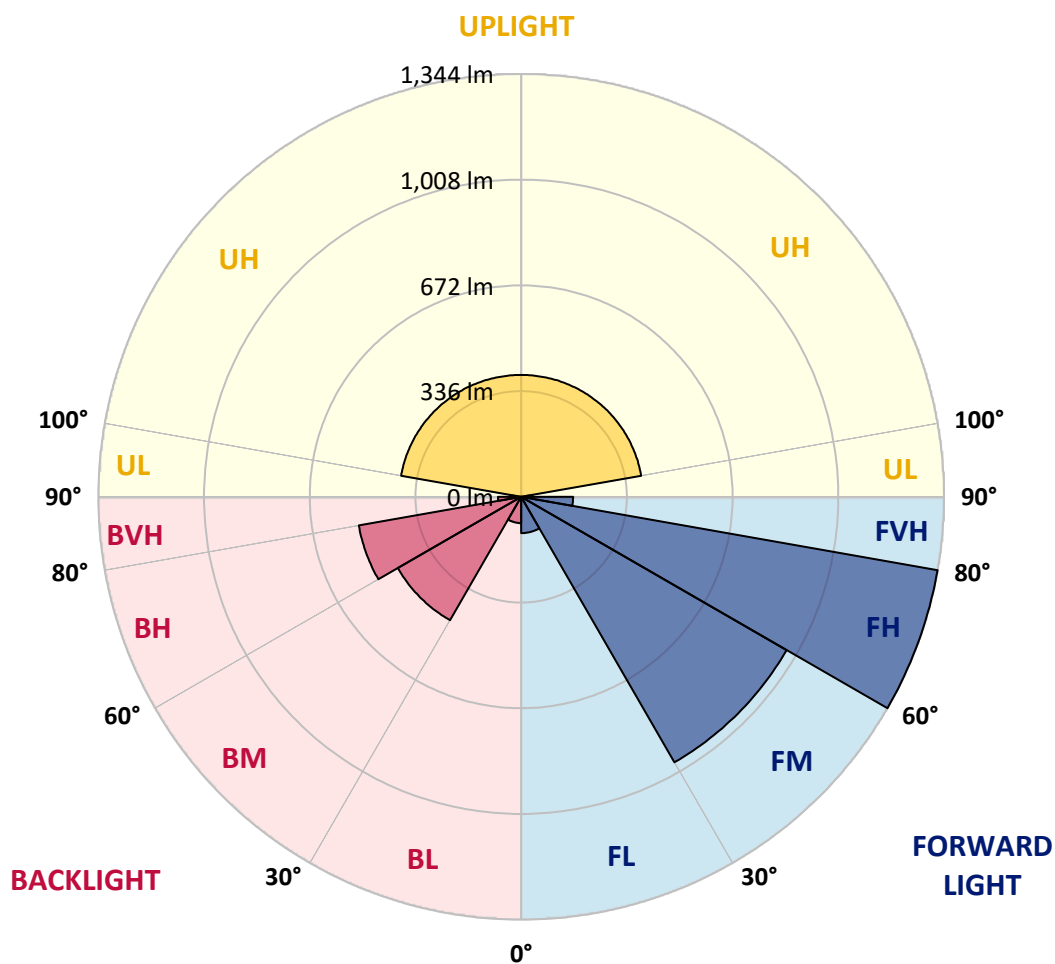
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	115.4	2.5			
FM	(30°-60°)	974.0	21.5			
FH	(60°-80°)	1343.7	29.6			G1/1800
FVH	(80°-90°)	165.0	3.6			G2/225
BL	(0°-30°)	83.6	1.8	B0/110		
BM	(30°-60°)	452.7	10.0	B1/1000		
BH	(60°-80°)	523.9	11.6	B2/1000		G2/1000
BVH	(80°-90°)	73.8	1.6			G1/100
UL	(90°-100°)	36.3	0.8		U2/50	
UH	(100°-180°)	387.3	8.5		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7
2.5°	176.5	177.2	177.2	177.2	176.5	175.7	175.7	175.0	174.2	174.2	173.5
5°	184.8	184.8	184.8	184.0	183.3	182.5	181.8	181.0	178.7	177.2	176.5
7.5°	194.6	194.6	194.6	193.8	192.3	190.1	190.8	188.5	186.3	183.3	180.2
10°	205.9	206.6	207.4	205.1	203.6	201.4	200.6	197.6	194.6	190.8	187.0
12.5°	219.5	218.7	220.2	218.0	216.4	212.7	211.9	208.2	202.9	198.3	193.8
15°	236.1	236.8	236.1	234.5	231.5	227.8	227.8	222.5	216.4	209.7	202.1
17.5°	259.4	259.4	256.4	255.7	250.4	245.9	244.4	239.8	230.0	221.7	212.7
20°	285.1	283.6	279.8	280.6	276.0	269.2	267.7	260.2	249.6	236.8	224.7
22.5°	314.5	313.0	308.5	307.7	301.7	296.4	296.4	285.8	271.5	254.9	238.3
25°	337.9	338.6	339.4	340.1	335.6	327.3	326.6	315.2	296.4	275.3	253.4
27.5°	366.5	370.3	369.5	373.3	371.1	363.5	362.0	349.9	326.6	301.7	274.5
30°	399.0	404.2	401.2	408.8	408.8	403.5	400.5	388.4	365.0	329.6	297.1
32.5°	435.2	435.9	440.4	450.2	454.8	451.8	449.5	438.2	408.0	368.8	326.6
35°	476.6	472.9	480.4	499.3	506.1	506.8	506.1	492.5	465.3	417.1	363.5
37.5°	518.1	516.6	530.9	549.8	570.2	578.5	574.7	570.2	530.9	470.6	402.0
40°	557.3	564.1	583.0	606.4	638.8	658.4	659.2	650.1	609.4	536.2	448.0
42.5°	595.8	609.4	633.5	674.2	715.7	747.4	743.6	736.1	700.6	613.1	506.8
45°	648.6	662.2	686.3	735.3	801.7	840.9	841.7	855.2	825.1	716.5	586.8
47.5°	696.9	708.9	744.4	810.0	891.4	963.1	960.1	979.7	941.2	811.5	649.3
50°	763.2	759.5	811.5	902.8	1013.6	1104.1	1123.7	1133.5	1061.1	930.7	716.5
52.5°	822.1	818.3	883.1	1005.3	1143.3	1260.2	1249.7	1273.8	1243.6	1092.0	859.8
55°	880.9	880.9	962.3	1123.0	1304.7	1457.8	1466.9	1507.6	1426.2	1212.7	910.3
57.5°	945.7	952.5	1067.9	1268.5	1491.0	1658.4	1659.9	1663.7	1532.5	1261.0	923.9
60°	1008.3	1026.4	1176.5	1411.8	1638.1	1775.3	1787.4	1735.4	1573.2	1291.9	929.1
62.5°	1077.7	1095.8	1279.8	1531.0	1746.7	1822.8	1819.1	1767.8	1640.3	1378.6	996.3
65°	1129.8	1163.7	1356.0	1613.2	1788.2	1878.7	1880.2	1871.1	1753.5	1452.5	1024.2
67.5°	1182.6	1233.8	1395.2	1644.9	1817.6	1865.1	1862.8	1828.1	1707.5	1411.1	968.4
70°	1239.1	1276.8	1422.4	1616.2	1729.3	1735.4	1737.6	1687.8	1589.8	1325.8	898.2
72.5°	1258.7	1285.9	1380.9	1497.0	1549.8	1548.3	1527.2	1508.4	1425.4	1195.4	797.9
75°	1224.0	1226.3	1240.6	1291.2	1315.3	1294.9	1306.2	1278.3	1230.8	1027.2	680.3
77.5°	1088.3	1084.5	1043.8	1025.7	1026.4	1021.9	1022.7	988.7	968.4	846.2	552.1
80°	849.2	848.5	816.0	765.5	749.7	745.1	749.7	733.1	714.2	638.8	420.1
82.5°	589.0	580.0	565.6	525.7	523.4	514.3	516.6	513.6	504.5	454.0	297.9
85°	285.8	297.9	310.7	307.7	297.9	299.4	309.2	308.5	297.9	260.2	173.5
87.5°	39.2	56.6	58.8	56.6	71.6	89.7	71.6	73.2	58.8	60.3	38.5
90°	36.0	36.0	36.0	34.0	29.0	26.0	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	30.0	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	32.8	33.0	34.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	35.8	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	52.0	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	86.8	84.0	84.0	78.0	74.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	106.2	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.0	123.2	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	135.8	138.0	141.0	139.0	133.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	147.2	150.0	153.0	148.0	145.0
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.8	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	177.4	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.0	185.4	183.0	183.0	184.0	171.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	194.2	190.0	192.0	192.0	179.0
135°	210.0	210.0	209.0	192.0	199.0	201.0	200.2	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	207.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.8	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	223.4	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	229.8	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	235.0	235.8	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	243.0	242.2	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	234.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	219.0	218.4	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	197.6	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.6	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	158.8	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	147.0	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	140.8	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.8	138.0	141.0	141.0	143.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.8	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°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7
2.5°	172.7	172.0	171.2	170.4	169.7	168.9	168.2	168.2	167.4	167.4	167.4
5°	175.7	175.0	173.5	172.0	171.2	169.7	168.9	168.2	166.7	166.7	165.9
7.5°	178.7	178.0	175.7	173.5	172.0	170.4	169.7	168.9	168.2	166.7	166.7
10°	184.8	182.5	179.5	176.5	173.5	172.0	170.4	169.7	169.7	168.9	168.9
12.5°	190.8	188.5	183.3	179.5	175.7	173.5	172.0	172.0	171.2	171.2	170.4
15°	198.3	195.3	189.3	184.0	179.5	177.2	175.0	175.0	175.0	175.0	175.0
17.5°	207.4	202.9	196.1	190.1	185.5	182.5	180.2	180.2	179.5	180.2	181.0
20°	219.5	213.4	204.4	196.8	191.6	189.3	187.8	187.0	187.0	187.8	188.5
22.5°	230.8	224.0	211.9	204.4	199.9	196.1	195.3	195.3	194.6	196.1	196.1
25°	244.4	236.1	223.2	213.4	207.4	204.4	204.4	204.4	205.1	205.9	204.4
27.5°	262.5	252.6	235.3	223.2	218.0	214.9	213.4	214.9	215.7	216.4	214.9
30°	280.6	270.0	248.1	234.5	227.0	224.0	224.0	225.5	226.3	227.0	225.5
32.5°	305.4	289.6	266.2	248.9	240.6	237.6	237.6	238.3	238.3	239.8	239.1
35°	340.1	318.3	288.9	268.5	256.4	251.9	251.1	251.9	253.4	252.6	255.7
37.5°	373.3	348.4	311.5	289.6	277.5	270.7	267.7	267.0	268.5	269.2	270.0
40°	412.5	382.4	339.4	312.2	297.1	289.6	285.1	285.1	284.3	285.1	282.1
42.5°	463.1	429.1	374.8	340.1	319.0	312.2	303.9	301.7	299.4	300.2	295.6
45°	531.7	488.7	423.8	377.8	349.9	335.6	327.3	320.5	317.5	316.0	311.5
47.5°	579.2	533.2	463.1	413.3	383.9	365.0	352.2	343.2	335.6	331.8	332.6
50°	642.6	583.0	510.6	450.2	420.1	399.0	383.9	368.0	356.7	352.2	354.5
52.5°	762.5	690.8	578.5	507.6	457.0	433.7	417.8	398.2	381.6	373.3	375.6
55°	802.4	729.3	626.0	553.6	508.3	479.7	454.8	431.4	409.5	395.9	396.7
57.5°	806.2	733.8	634.3	573.9	543.0	523.4	500.0	469.1	438.9	420.1	418.6
60°	802.4	728.5	632.8	571.7	549.8	549.0	534.7	507.6	472.1	444.2	441.9
62.5°	855.2	776.0	659.9	584.5	553.6	555.8	558.8	540.0	503.8	469.9	462.3
65°	865.0	781.3	671.2	600.3	576.9	572.4	570.2	557.3	527.9	491.0	484.9
67.5°	816.8	737.6	637.3	576.2	560.4	570.2	578.5	567.1	539.2	511.3	503.0
70°	752.7	681.0	587.5	530.9	521.9	537.0	555.1	558.8	543.0	520.4	517.4
72.5°	666.7	606.4	524.2	478.9	475.1	486.4	507.6	524.9	522.6	517.4	515.9
75°	567.9	521.1	449.5	414.8	414.8	429.1	445.0	463.8	478.1	487.2	489.5
77.5°	467.6	420.8	368.0	338.6	342.4	361.3	372.6	391.4	407.3	419.3	420.1
80°	351.4	325.8	279.8	264.0	265.5	278.3	294.1	305.4	318.3	328.8	325.8
82.5°	254.2	230.8	199.1	190.1	196.1	202.1	214.9	224.7	228.5	231.5	237.6
85°	146.3	139.5	122.2	116.9	118.4	124.4	132.0	134.2	138.0	136.5	139.5
87.5°	35.4	37.7	35.4	34.7	35.4	33.9	32.4	39.2	40.0	40.7	39.2
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)