

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: P198305

Luminaire Tested: **TT-C2-LED-E1-DL-CG-MS/DIM-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198305
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-C2-LED-E1-DL-CG-MS/DIM-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3458 lumens
Efficiency: N/A
Efficacy: 58.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U4 - G1

Input Watts (W): 58.8
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



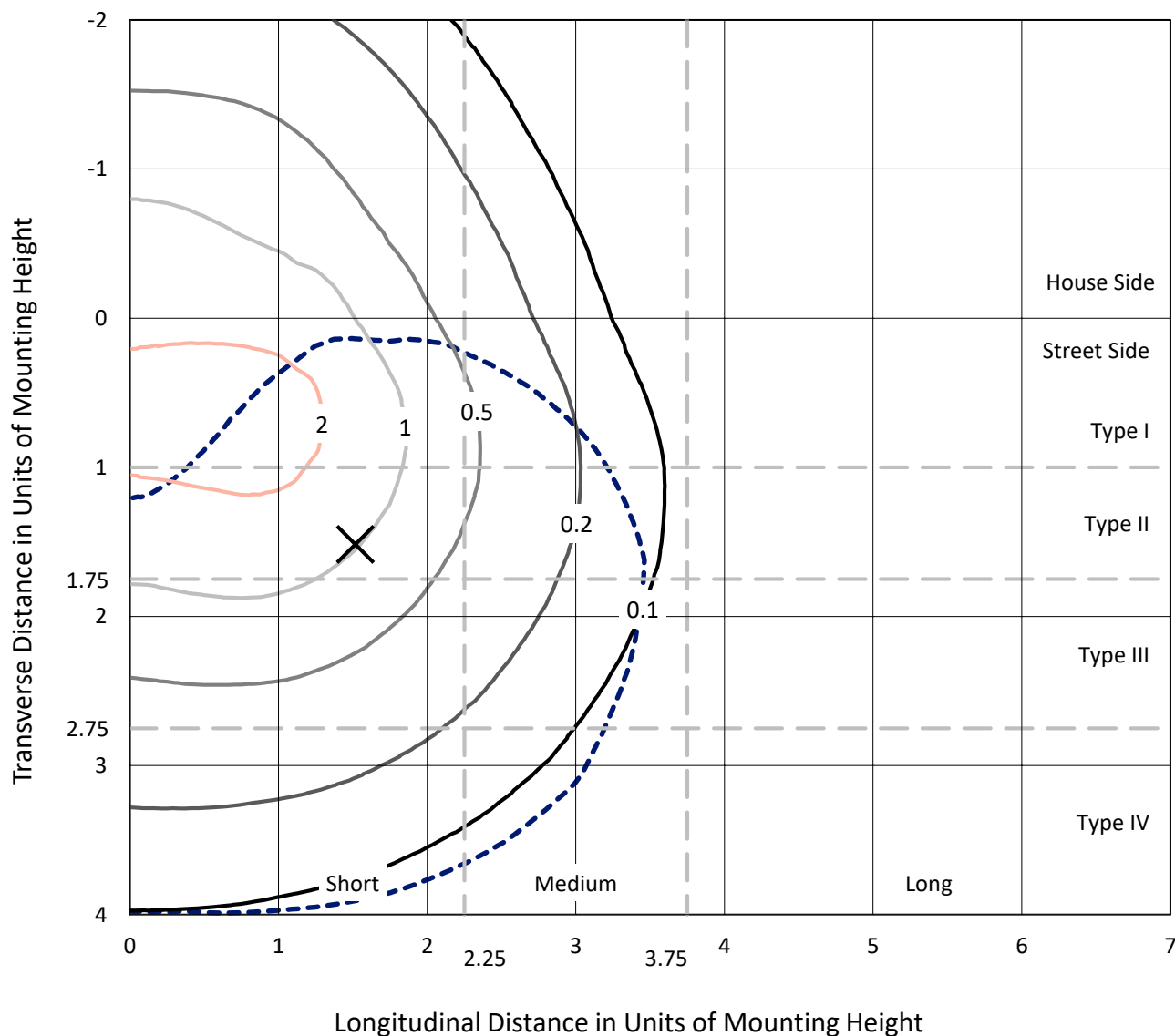
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

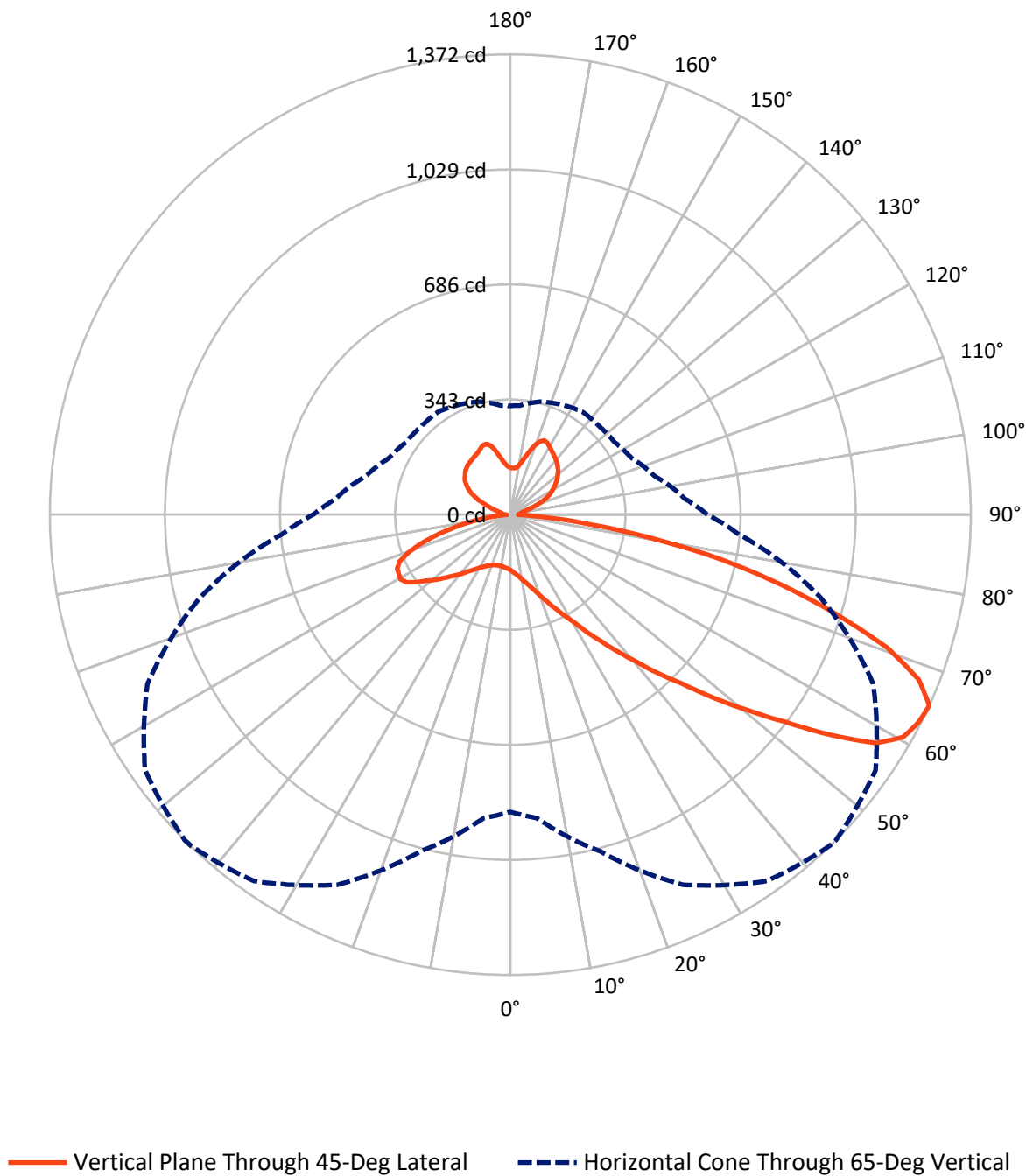


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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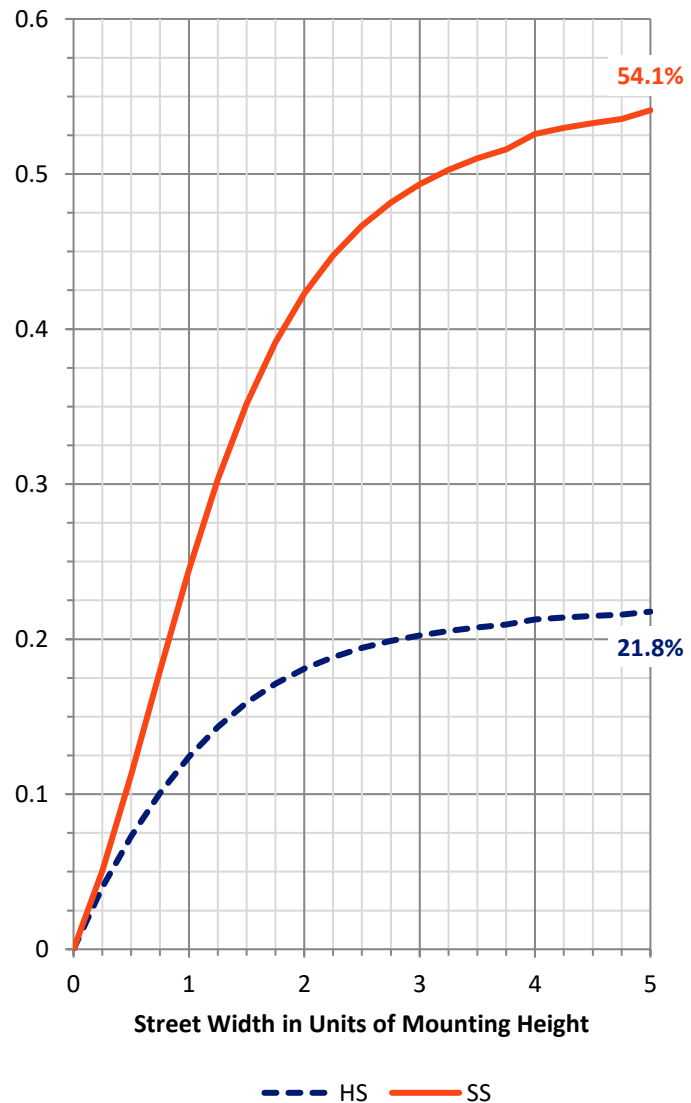
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	761.9	387.3	1149.3
	% Fixture	22.0	11.2	33.2
Street Side	Lumens	1896.1	412.6	2308.7
	% Fixture	54.8	11.9	66.8
Total	Lumens	2658.0	800.0	3458.0
	% Fixture	76.9	23.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.4	0.5
10°-20°	54.3	1.6
20°-30°	110.3	3.2
30°-40°	203.0	5.9
40°-50°	359.5	10.4
50°-60°	589.8	17.1
60°-70°	724.6	21.0
70°-80°	498.6	14.4
80°-90°	101.6	2.9
90°-100°	36.3	1.1
100°-110°	55.2	1.6
110°-120°	110.8	3.2
120°-130°	144.2	4.2
130°-140°	148.0	4.3
140°-150°	133.4	3.9
150°-160°	102.6	3.0
160°-170°	55.1	1.6
170°-180°	14.3	0.4
0°-90°	2658.0	76.9
0°-180°	3458.0	100.0

Coefficient of Utilization



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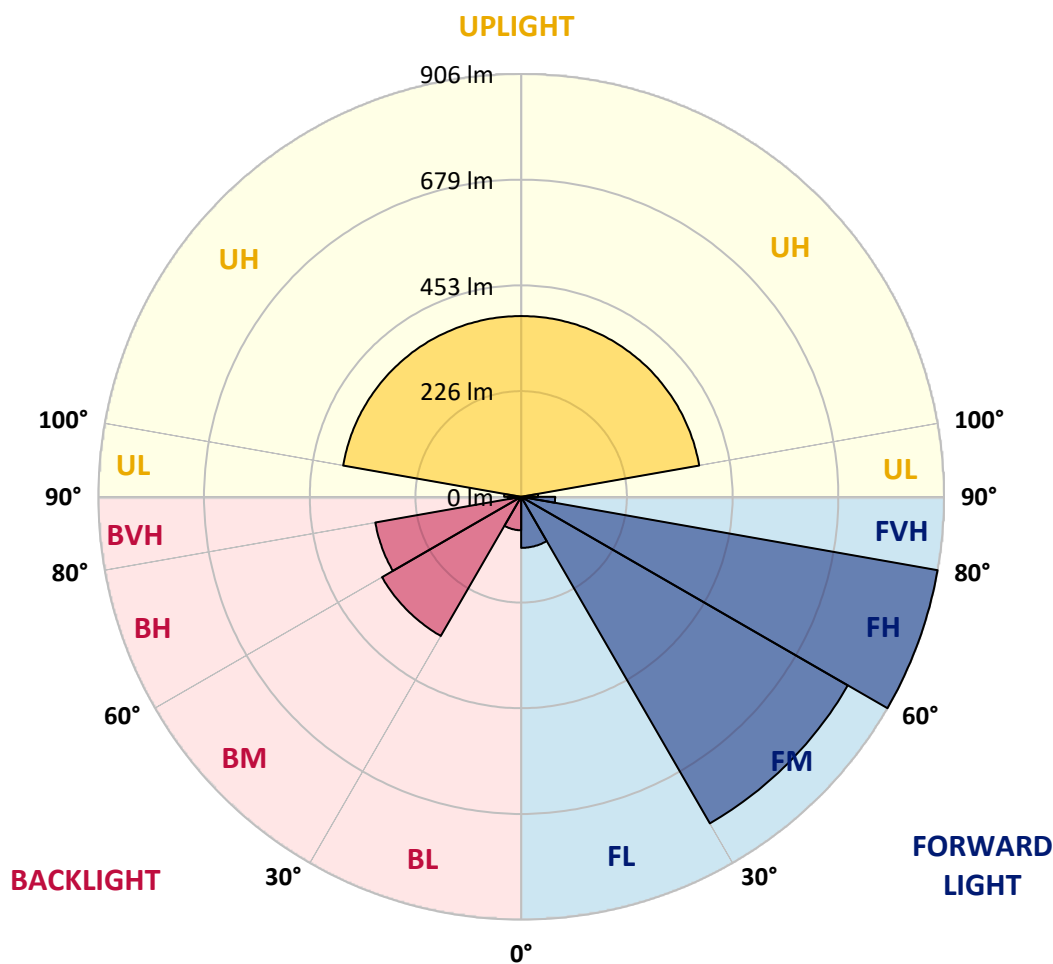
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	109.4	3.2			
FM	(30°-60°)	807.9	23.4			
FH	(60°-80°)	905.8	26.2			G1/1800
FVH	(80°-90°)	72.9	2.1			G1/100
BL	(0°-30°)	71.6	2.1	B0/110		
BM	(30°-60°)	344.3	10.0	B1/1000		
BH	(60°-80°)	317.3	9.2	B1/500		G1/500
BVH	(80°-90°)	28.7	0.8			G1/100
UL	(90°-100°)	36.3	1.1		U2/50	
UH	(100°-180°)	387.3	11.2		U3/500	

BUG Rating: B1-U4-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4
2.5°	174.5	174.5	173.9	173.4	172.9	172.3	172.3	171.3	170.2	169.1	168.1
5°	183.5	183.0	183.0	182.5	181.4	179.3	178.7	177.7	175.5	172.9	170.7
7.5°	193.1	193.1	193.1	191.5	189.4	187.8	186.7	184.6	181.4	177.7	173.9
10°	204.4	204.9	203.8	202.8	200.6	197.4	197.4	193.1	188.3	183.5	178.7
12.5°	217.7	218.2	218.2	216.1	211.8	209.2	208.1	203.3	197.4	191.0	184.1
15°	231.6	233.7	232.6	231.6	226.8	223.0	222.0	214.5	208.1	199.6	191.0
17.5°	253.4	252.4	250.2	247.6	244.9	239.6	238.5	230.5	220.9	210.2	199.0
20°	273.7	273.7	271.6	269.4	266.2	258.8	259.8	249.2	236.4	223.6	208.6
22.5°	296.1	296.7	295.1	292.9	290.3	284.4	282.8	271.6	255.0	238.0	220.4
25°	318.5	319.6	320.7	320.7	316.9	310.0	308.9	294.5	277.5	255.0	233.7
27.5°	345.2	347.9	346.8	347.9	346.3	338.3	338.3	323.3	304.1	276.4	248.6
30°	370.3	373.5	375.1	379.4	379.4	374.6	370.8	357.0	334.0	301.5	267.8
32.5°	403.4	403.4	406.6	415.6	420.4	413.5	415.6	400.2	369.8	331.3	289.7
35°	437.0	437.0	442.9	455.1	459.9	461.5	461.5	442.3	411.9	366.0	316.4
37.5°	472.2	473.3	484.5	501.0	514.9	513.3	515.4	499.9	464.2	407.1	347.3
40°	507.4	510.6	528.2	547.4	570.9	578.4	575.2	565.6	520.8	455.7	382.0
42.5°	545.8	551.7	571.4	601.3	626.4	646.7	647.2	631.7	587.4	512.2	423.6
45°	585.8	594.9	615.7	654.7	695.2	719.2	718.7	720.3	676.0	582.6	477.0
47.5°	631.7	637.6	666.9	714.4	768.9	816.9	816.3	814.7	757.7	647.7	519.2
50°	677.6	680.8	720.8	789.7	862.8	909.7	915.6	921.5	844.1	729.4	570.9
52.5°	725.1	727.2	776.9	859.6	964.1	1033.5	1026.0	1028.7	970.0	835.6	653.1
55°	771.0	771.5	834.0	950.3	1076.7	1148.2	1159.4	1171.7	1073.0	893.2	677.6
57.5°	810.5	814.7	898.0	1041.0	1192.0	1289.6	1284.3	1268.8	1130.1	916.1	681.4
60°	844.6	854.8	961.5	1125.3	1280.0	1339.8	1345.6	1293.3	1148.2	925.7	677.1
62.5°	869.7	886.2	1017.0	1189.3	1331.2	1368.0	1364.3	1304.0	1178.6	963.6	703.2
65°	885.7	907.6	1039.4	1217.0	1332.8	1370.7	1371.8	1328.0	1192.5	957.2	684.6
67.5°	887.3	918.3	1032.4	1197.8	1307.8	1317.9	1312.0	1247.5	1128.5	898.5	631.2
70°	875.0	898.0	998.3	1125.3	1202.6	1196.8	1193.0	1125.8	1013.2	812.1	562.4
72.5°	827.0	843.6	912.4	1001.5	1036.2	1033.0	1017.5	966.3	875.6	695.2	475.9
75°	731.5	742.7	773.1	821.7	853.7	842.5	832.9	783.3	708.0	567.7	377.8
77.5°	601.9	589.6	605.1	624.3	640.3	644.0	641.9	591.2	536.8	427.4	287.6
80°	421.5	417.8	416.2	424.7	439.1	433.8	425.2	405.5	362.8	291.3	201.7
82.5°	250.2	246.0	244.4	248.6	241.2	242.2	242.8	222.5	211.3	177.7	115.8
85°	110.4	110.4	107.8	107.8	107.2	107.8	110.4	103.5	96.6	80.6	55.5
87.5°	16.5	14.9	20.8	19.2	22.4	25.6	23.5	22.4	18.7	14.4	11.2
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°	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4
2.5°	167.5	167.0	165.4	164.3	162.7	161.7	160.6	160.1	160.1	159.5	160.1
5°	169.7	168.6	165.9	163.8	161.7	160.1	158.5	156.9	155.8	155.3	155.3
7.5°	171.8	170.2	166.5	163.3	160.1	157.4	155.3	154.2	152.6	152.1	151.5
10°	175.5	173.4	168.1	163.3	159.5	155.8	153.1	151.5	150.5	149.9	149.9
12.5°	180.9	177.1	170.7	164.9	159.5	155.3	152.1	149.9	148.9	147.8	148.3
15°	186.2	181.9	173.9	165.9	160.1	155.8	152.1	149.9	148.3	147.8	147.3
17.5°	193.1	188.3	178.7	169.7	162.2	156.9	153.1	151.0	149.4	148.9	148.9
20°	202.2	195.8	183.5	173.4	165.4	159.5	155.3	153.1	151.5	151.5	151.5
22.5°	211.3	203.3	188.9	177.7	169.1	162.7	159.0	156.9	155.3	154.7	155.3
25°	222.0	212.9	196.3	183.0	173.9	168.1	164.3	161.7	160.1	160.1	160.1
27.5°	236.4	225.7	204.4	191.0	180.3	173.9	169.7	168.1	167.0	166.5	165.9
30°	252.4	238.5	216.1	199.0	188.3	181.4	177.7	176.1	174.5	173.4	172.9
32.5°	271.6	255.6	227.3	209.7	197.4	190.5	186.7	184.6	183.0	182.5	182.5
35°	295.6	275.8	243.3	222.5	208.6	201.2	197.4	195.3	193.7	193.1	193.7
37.5°	319.6	296.7	260.4	236.4	222.0	212.9	209.2	206.5	205.4	204.4	204.9
40°	348.9	320.7	280.1	253.4	236.4	228.9	223.0	219.8	218.2	216.6	215.6
42.5°	384.7	352.7	304.7	271.6	253.4	243.3	237.4	233.7	230.5	229.4	227.8
45°	430.0	391.1	336.7	294.5	272.6	259.8	252.9	248.1	243.3	242.2	240.6
47.5°	467.4	425.2	363.4	321.2	296.1	279.1	269.4	262.5	256.6	255.6	254.0
50°	509.0	461.5	388.4	343.6	315.3	300.9	288.7	279.1	272.6	269.4	270.5
52.5°	580.0	520.2	433.2	374.6	338.8	320.1	310.5	297.7	287.6	282.8	283.9
55°	595.5	538.9	457.3	404.4	369.2	347.3	330.3	317.5	304.7	296.1	295.6
57.5°	594.9	536.8	455.7	408.7	384.2	369.8	354.8	334.0	318.5	307.3	306.8
60°	588.0	528.8	447.7	401.2	383.6	379.4	371.4	355.9	330.8	318.5	315.9
62.5°	605.1	543.2	454.1	400.2	378.3	376.2	374.0	364.4	342.0	324.9	322.3
65°	586.9	524.0	444.5	398.6	377.8	373.5	374.0	361.2	348.4	326.5	323.9
67.5°	534.1	480.2	406.6	367.1	357.0	358.0	361.8	355.9	341.5	323.3	321.2
70°	475.4	425.8	360.7	325.5	318.0	323.9	334.0	334.5	324.9	310.5	311.1
72.5°	400.2	358.0	305.7	277.5	274.8	279.6	287.6	297.2	294.5	290.3	290.8
75°	324.4	290.3	242.8	224.1	223.6	227.3	238.0	245.4	250.8	252.4	256.1
77.5°	240.6	220.9	184.6	169.1	167.5	172.3	184.1	190.5	198.0	203.8	209.2
80°	168.6	150.5	127.0	115.2	117.4	120.6	128.1	136.1	141.4	146.2	146.2
82.5°	98.7	89.1	75.8	70.4	71.5	76.3	77.9	84.8	85.4	88.6	90.7
85°	46.4	40.0	36.3	35.7	35.7	36.3	39.5	40.0	40.6	41.6	45.9
87.5°	9.6	9.6	9.6	9.6	9.6	11.2	11.7	12.8	12.3	12.8	12.3
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)