

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: P198284

Luminaire Tested: **TT-C1-LED-E1-WQ-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198284
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-WQ-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3660.9 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G1

Input Watts (W): 45.4
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



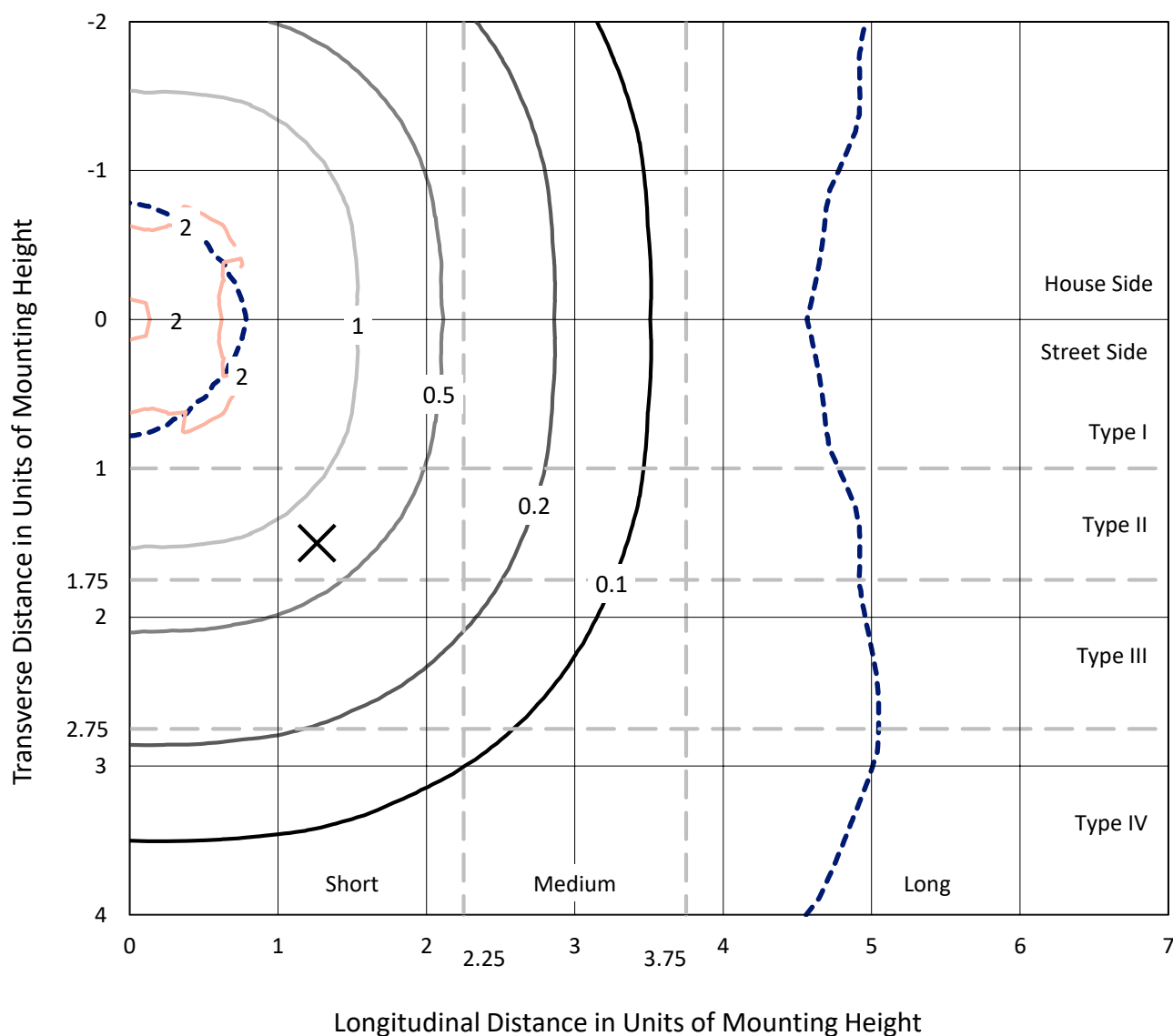
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

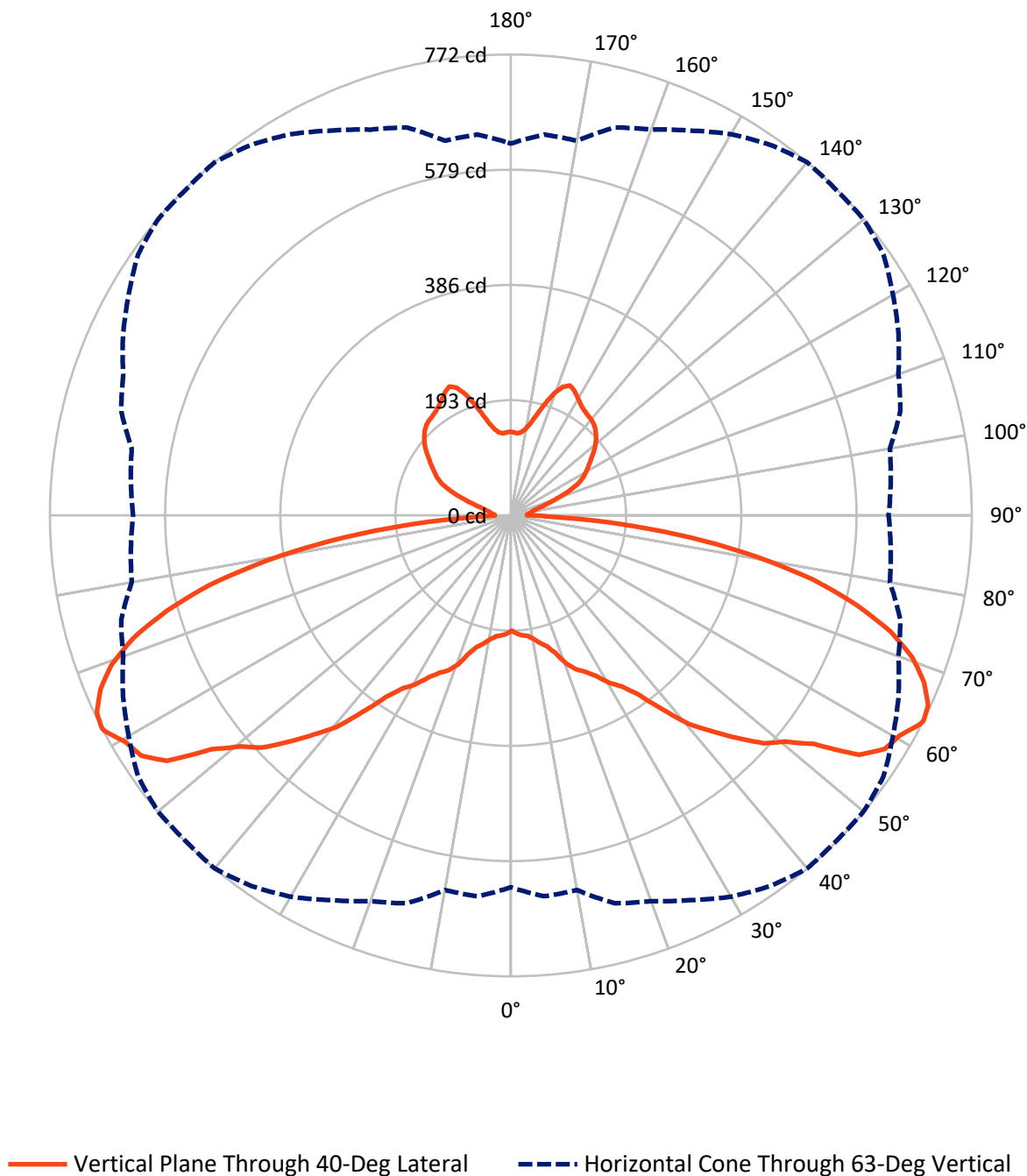


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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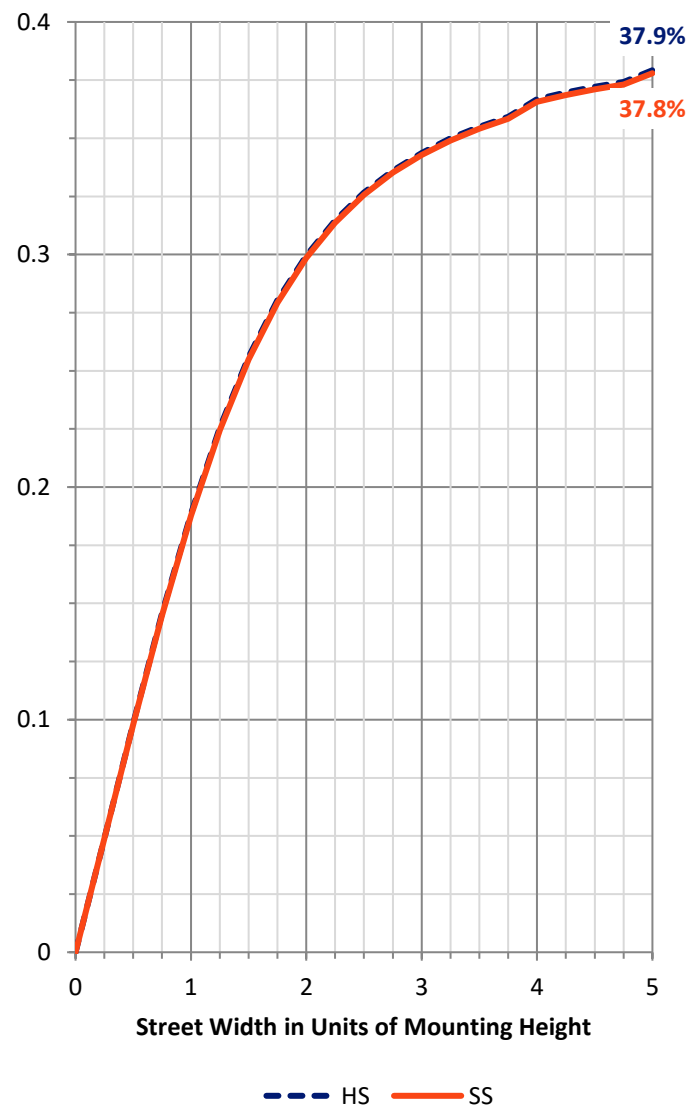
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1418.5	412.0	1830.5
	% Fixture	38.7	11.3	50.0
Street Side	Lumens	1418.5	412.0	1830.5
	% Fixture	38.7	11.3	50.0
Total	Lumens	2836.9	824.0	3660.9
	% Fixture	77.5	22.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	0.5
10°-20°	66.2	1.8
20°-30°	134.5	3.7
30°-40°	231.9	6.3
40°-50°	390.6	10.7
50°-60°	575.2	15.7
60°-70°	684.0	18.7
70°-80°	553.7	15.1
80°-90°	181.5	5.0
90°-100°	38.3	1.0
100°-110°	59.4	1.6
110°-120°	119.3	3.3
120°-130°	148.7	4.1
130°-140°	153.2	4.2
140°-150°	136.0	3.7
150°-160°	103.7	2.8
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2836.9	77.5
0°-180°	3660.9	100.0

Coefficient of Utilization



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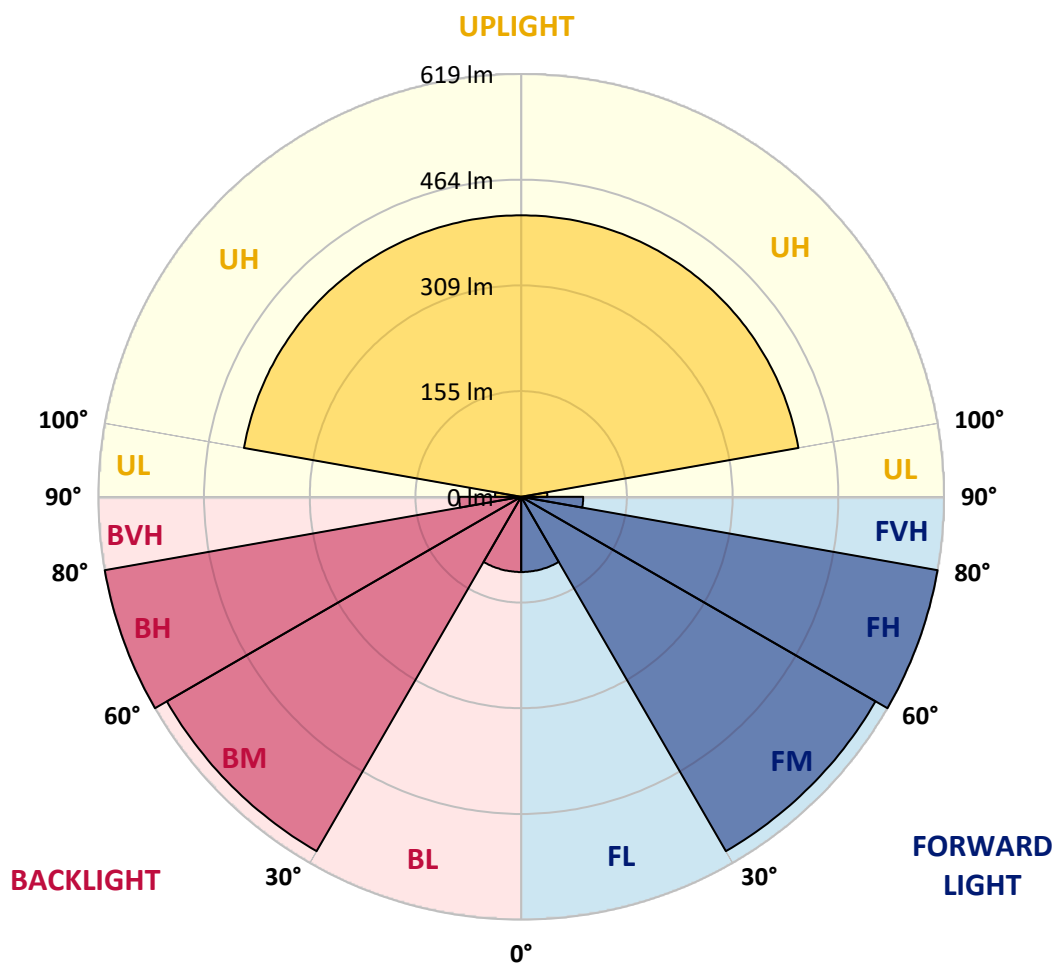
CATALOG NUMBER: TT-C1-LED-E1-WQ-LWR-LW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	110.1	3.0			
FM	(30°-60°)	598.8	16.4			
FH	(60°-80°)	618.8	16.9			G0/660
FVH	(80°-90°)	90.8	2.5			G1/100
BL	(0°-30°)	110.1	3.0	B1/500		
BM	(30°-60°)	598.8	16.4	B1/1000		
BH	(60°-80°)	618.8	16.9	B2/1000		G0/660
BVH	(80°-90°)	90.8	2.5			G1/100
UL	(90°-100°)	38.3	1.0		U2/50	
UH	(100°-180°)	412.0	11.3		U3/500	

BUG Rating: B2-U4-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	192.8	192.8	192.8	192.8	192.8	192.8	192.8	192.8	192.8	192.8	192.8
2.5°	198.9	198.9	198.9	198.9	198.9	198.9	198.3	198.9	198.3	198.3	198.3
5°	202.7	202.7	202.7	202.7	202.1	202.1	201.6	201.6	201.6	201.1	201.6
7.5°	204.4	204.4	204.4	204.4	203.8	203.8	203.8	203.8	203.8	203.8	203.8
10°	208.2	208.2	208.7	209.3	210.4	210.4	210.4	211.0	210.4	210.4	210.4
12.5°	216.4	215.9	217.0	218.0	219.2	219.7	219.7	219.7	219.2	219.2	219.7
15°	227.9	226.8	227.4	227.9	228.5	229.0	229.0	228.5	227.4	227.4	227.4
17.5°	242.7	241.1	240.5	240.0	240.0	241.1	242.2	241.6	242.2	241.6	242.2
20°	260.3	259.1	259.1	259.1	259.7	261.9	264.1	265.2	264.6	263.5	265.2
22.5°	271.7	272.3	275.0	274.5	273.9	276.2	278.9	281.1	279.9	278.3	279.4
25°	284.4	284.4	288.2	289.8	288.2	288.2	289.3	290.9	289.8	288.8	289.8
27.5°	298.6	298.6	300.2	301.9	300.8	300.8	302.4	305.2	304.6	304.1	304.6
30°	315.6	313.4	311.7	314.5	317.3	317.8	319.4	323.8	324.9	324.3	325.5
32.5°	331.5	328.2	329.3	330.9	336.9	339.1	338.6	341.9	341.3	339.7	341.9
35°	346.8	350.7	352.8	356.1	358.3	361.0	361.0	367.1	368.2	366.6	368.2
37.5°	376.4	378.0	384.1	384.6	387.4	397.8	398.9	407.1	411.5	409.3	409.8
40°	416.9	416.4	420.8	427.3	432.8	446.0	449.8	455.3	459.1	457.5	459.7
42.5°	449.8	445.4	448.7	463.0	469.0	478.9	483.8	486.5	493.7	491.4	494.2
45°	473.4	475.0	479.4	493.7	497.5	505.7	517.2	522.2	531.5	528.7	530.4
47.5°	496.4	504.0	507.9	514.5	526.5	537.5	551.7	556.6	569.8	568.7	567.1
50°	526.5	532.5	536.9	541.8	558.3	576.4	588.4	590.6	595.0	591.7	597.2
52.5°	558.9	558.3	562.1	575.8	598.8	606.0	616.4	626.2	635.5	638.8	635.5
55°	601.6	587.9	603.8	623.5	633.4	650.3	675.5	689.3	707.3	710.1	704.6
57.5°	619.1	619.1	635.5	647.0	665.2	695.3	722.1	728.7	738.0	733.1	738.6
60°	616.9	637.7	637.7	658.0	687.6	714.5	724.3	735.3	747.9	747.3	747.3
62.5°	619.7	639.9	634.4	669.5	687.6	709.5	731.4	751.7	769.2	768.7	768.2
63°	622.4	639.9	636.7	672.2	687.1	710.6	736.9	757.2	771.5	770.3	770.9
65°	630.6	625.7	645.4	667.9	684.8	719.9	741.8	757.7	767.6	767.1	767.1
67.5°	615.3	603.8	631.7	640.5	672.8	704.0	721.0	739.1	746.2	746.2	745.1
70°	568.2	573.1	592.3	606.5	639.4	667.3	681.6	704.6	713.3	713.3	712.8
72.5°	520.5	528.7	541.8	562.1	593.4	615.3	632.3	653.1	664.6	664.0	664.0
75°	459.7	467.3	482.7	501.9	529.2	550.7	564.3	584.1	597.2	602.1	596.7
77.5°	391.2	393.4	407.6	427.3	451.4	466.3	487.1	506.3	517.2	516.6	515.0
80°	307.9	310.7	322.7	345.1	358.3	375.9	395.1	405.4	414.7	414.7	413.6
82.5°	212.6	218.6	230.6	245.5	259.1	274.5	284.9	295.3	303.0	302.4	300.8
85°	120.0	122.7	134.2	143.5	154.0	163.8	171.0	177.5	184.1	184.1	183.0
87.5°	36.2	32.3	38.9	42.7	48.2	53.1	56.4	63.0	67.4	62.4	62.4
90°	36.0	36.0	36.0	36.0	35.0	34.0	31.0	29.0	27.0	26.0	26.0
92.5°	40.0	39.0	39.0	38.0	36.0	34.0	32.0	29.0	27.0	27.0	27.0
95°	44.0	43.0	42.0	41.0	38.0	36.0	34.0	32.0	31.0	30.0	30.0
97.5°	42.0	42.0	41.0	40.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.0
102.5°	51.0	51.0	50.0	49.0	47.0	46.0	45.0	44.0	42.0	42.0	42.0
105°	60.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	51.0	52.0	52.0
107.5°	72.0	72.0	72.0	70.0	68.0	67.0	66.0	66.0	66.0	68.0	68.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	103.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	120.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.0
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	148.0
122.5°	161.0	162.0	163.0	164.0	159.0	154.0	153.0	155.0	156.0	158.0	158.0
125°	169.0	169.0	170.0	172.0	168.0	163.0	160.0	165.0	166.0	168.0	167.0
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	175.0
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	183.0
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	191.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	197.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	203.0
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.0
142.5°	235.0	231.0	225.0	218.0	206.0	201.0	202.0	208.0	212.0	218.0	218.0
145°	235.0	230.0	225.0	218.0	207.0	202.0	204.0	211.0	215.0	223.0	225.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	233.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	239.0
152.5°	216.0	214.0	216.0	221.0	220.0	220.0	224.0	230.0	234.0	241.0	241.0
155°	208.0	207.0	211.0	219.0	222.0	224.0	229.0	237.0	239.0	243.0	239.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	230.0
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	216.0
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	196.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	175.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.0
170°	142.0	141.0	142.0	145.0	144.0	144.0	146.0	147.0	146.0	147.0	147.0
172.5°	137.0	135.0	136.0	139.0	139.0	138.0	140.0	141.0	140.0	141.0	140.0
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.0
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	192.8	192.8	192.8	192.8	192.8	192.8	192.8	192.8
2.5°	198.9	198.9	198.9	198.9	198.9	198.9	198.9	198.9
5°	201.6	202.1	202.1	202.7	202.7	202.7	202.7	202.7
7.5°	203.8	203.8	203.8	203.8	204.4	204.4	204.4	204.4
10°	210.4	211.0	210.4	210.4	209.3	208.7	208.7	208.7
12.5°	219.7	220.3	220.3	219.2	218.0	217.0	216.4	215.9
15°	228.5	230.1	229.0	228.5	227.4	227.9	227.9	228.5
17.5°	242.2	242.7	241.1	240.0	239.5	240.5	241.6	242.2
20°	265.7	264.6	261.3	260.3	259.1	259.1	260.3	260.3
22.5°	280.5	277.8	275.6	274.5	274.5	274.5	272.9	270.6
25°	290.9	289.3	287.6	288.8	289.8	288.2	284.4	283.8
27.5°	305.2	301.9	301.4	300.8	301.4	300.2	299.7	297.5
30°	323.8	319.4	318.3	317.3	314.0	312.8	314.0	315.6
32.5°	341.3	338.6	339.7	337.5	331.5	329.3	330.4	329.9
35°	366.6	361.6	361.6	357.2	355.6	355.0	350.7	346.8
37.5°	406.5	400.0	398.3	388.5	384.1	385.2	379.2	374.8
40°	455.3	450.4	446.0	435.0	429.0	421.3	417.5	417.5
42.5°	487.6	484.3	478.3	470.6	464.0	450.9	446.0	448.7
45°	523.2	518.9	506.3	498.6	492.5	483.2	477.8	472.3
47.5°	559.4	553.4	538.6	528.7	514.5	511.7	505.7	498.0
50°	591.2	589.0	578.5	562.1	544.1	539.7	534.2	527.1
52.5°	630.1	616.9	608.2	601.0	580.8	566.5	558.9	562.1
55°	693.7	677.2	654.7	632.3	627.9	610.9	591.7	602.1
57.5°	730.4	721.0	704.0	668.4	650.9	639.4	626.8	617.5
60°	739.1	722.1	718.3	691.4	663.5	639.4	644.3	622.4
62.5°	756.1	733.1	711.7	690.4	673.4	640.5	639.4	627.9
63°	761.6	738.6	716.1	690.4	675.0	644.3	638.3	632.3
65°	760.5	740.7	723.8	690.4	667.3	655.3	625.7	639.4
67.5°	739.7	723.2	703.5	680.5	642.1	632.8	612.0	614.7
70°	706.2	684.8	666.2	644.9	614.2	592.8	580.2	569.8
72.5°	654.2	635.0	615.3	595.6	568.2	542.4	533.6	522.2
75°	585.1	566.5	548.4	529.8	504.0	481.1	471.7	463.5
77.5°	506.3	490.4	464.6	447.1	432.3	407.6	398.9	390.1
80°	403.8	396.1	377.5	354.5	346.8	322.7	316.1	304.6
82.5°	293.7	286.0	271.2	255.3	246.0	233.4	222.4	214.8
85°	179.2	171.0	163.3	149.0	143.5	134.2	125.5	121.1
87.5°	64.7	58.1	52.1	45.5	42.2	35.6	34.5	31.3
90°	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
112.5°	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	140.0	140.0	138.0	140.0	141.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)