

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: INVUE

Report Number: P401079

Luminaire Tested: **ENV-SA1B-727-U-SLR-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401079
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1B-727-U-SLR-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2156 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 25.4
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

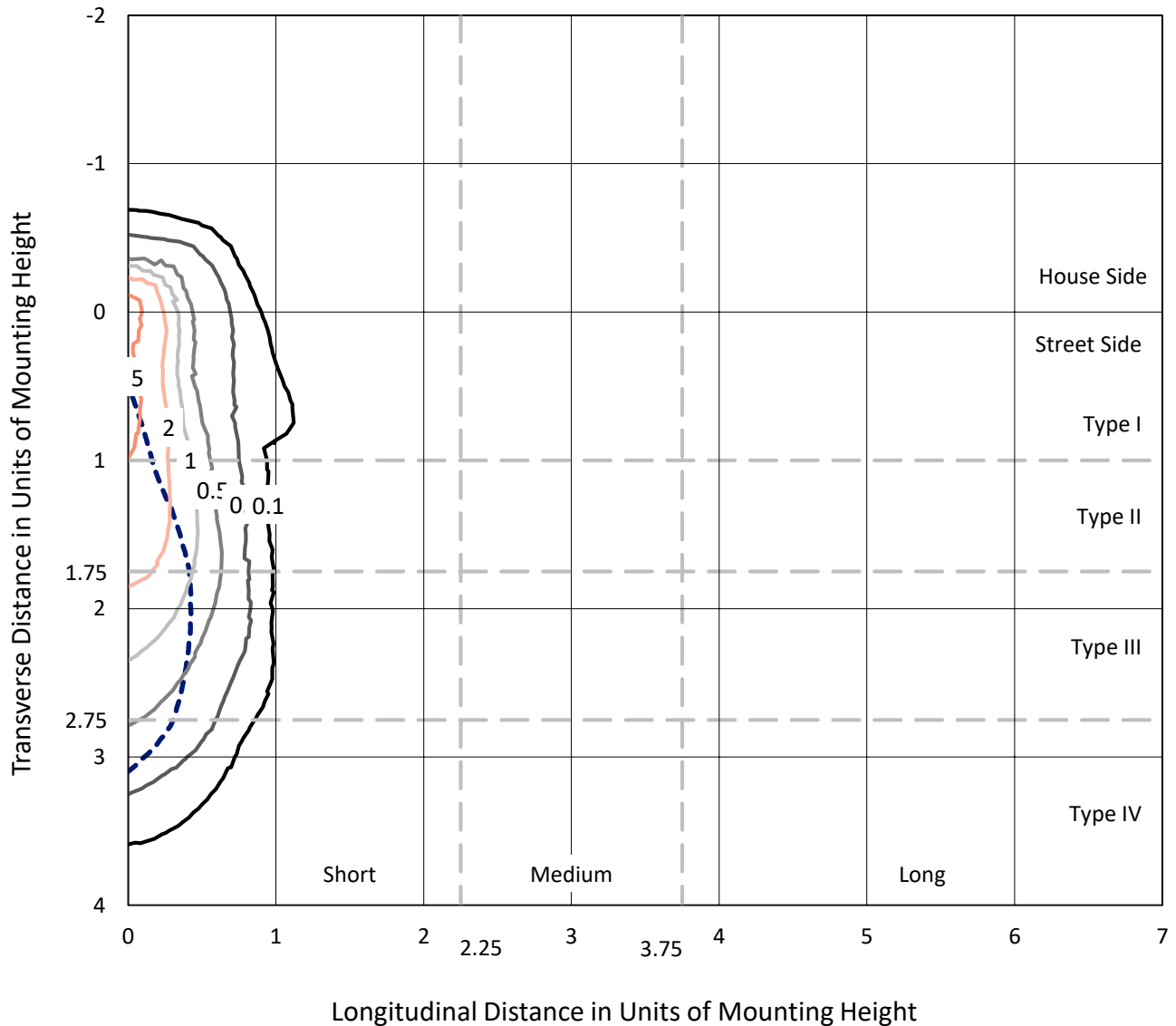


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

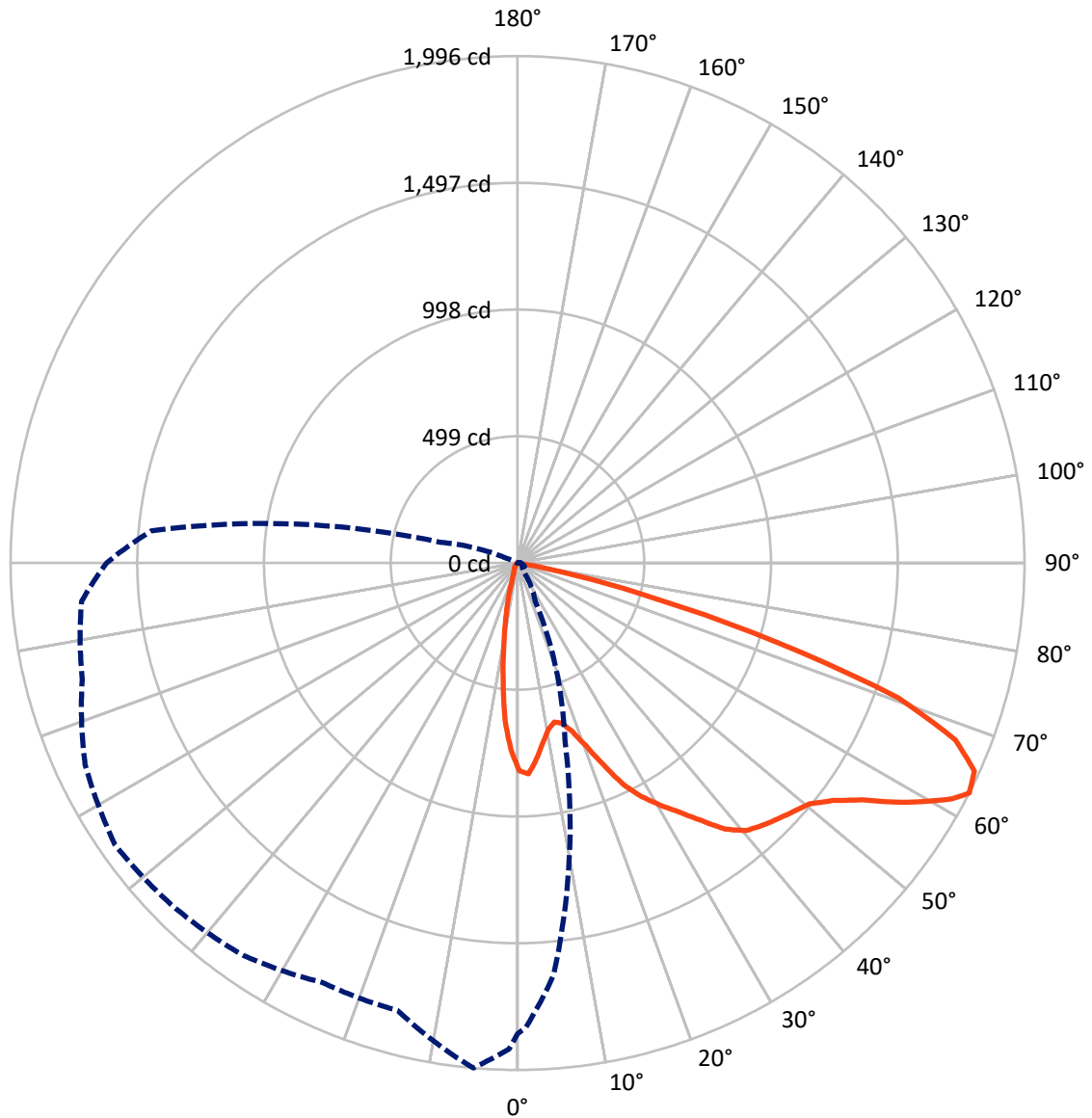


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	303.3	0.0	303.3
	% Fixture	14.1	0.0	14.1
Street Side	Lumens	1852.7	0.0	1852.7
	% Fixture	85.9	0.0	85.9
Total	Lumens	2156.0	0.0	2156.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	2.8
10°-20°	116.6	5.4
20°-30°	162.2	7.5
30°-40°	234.6	10.9
40°-50°	336.4	15.6
50°-60°	488.0	22.6
60°-70°	527.9	24.5
70°-80°	213.2	9.9
80°-90°	15.8	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2156.0	100.0
0°-180°	2156.0	100.0



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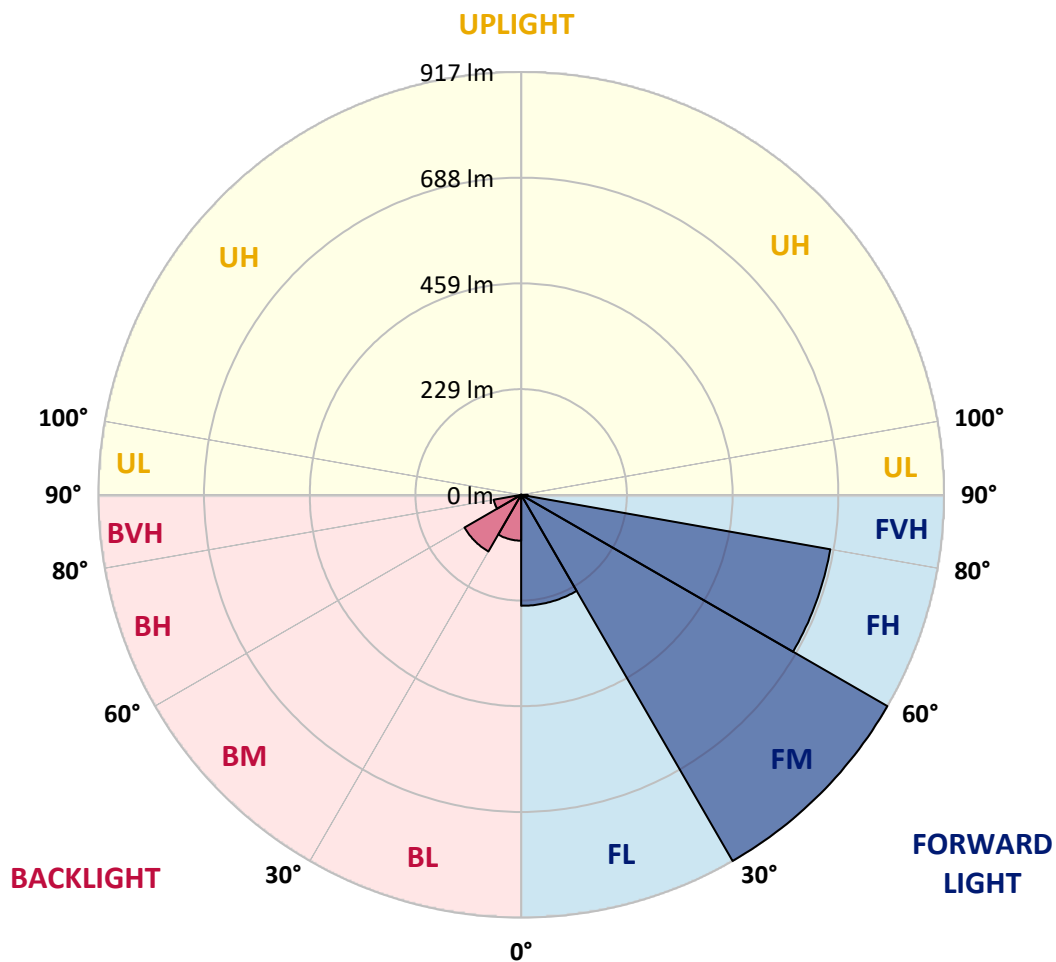
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	240.7	11.2			
FM (30°-60°)	917.0	42.5			
FH (60°-80°)	680.9	31.6			G1/1800
FVH (80°-90°)	14.2	0.7			G1/100
BL (0°-30°)	99.4	4.6	B0/110		
BM (30°-60°)	141.9	6.6	B0/220		
BH (60°-80°)	60.3	2.8	B0/110		G0/110
BVH (80°-90°)	1.6	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8
2.5°	821.2	817.8	810.1	793.5	769.6	754.3	744.4	731.6	718.4	714.1	705.6
5°	749.6	744.0	733.3	691.5	654.0	616.5	589.6	564.0	555.4	538.4	548.6
7.5°	680.4	677.9	653.1	599.0	539.2	491.0	460.3	422.8	411.7	394.2	380.1
10°	626.3	624.1	594.3	523.5	459.0	418.9	394.6	370.3	346.0	321.2	301.6
12.5°	599.0	594.3	559.7	483.4	423.6	390.4	364.8	332.3	306.3	273.0	249.1
15°	603.2	599.0	559.3	477.0	406.6	360.5	322.5	284.1	247.4	214.6	191.1
17.5°	637.4	635.7	587.4	482.5	386.1	325.1	274.3	222.7	179.2	143.8	123.7
20°	703.9	698.8	628.8	494.4	364.8	284.1	214.6	151.0	114.8	90.4	81.9
22.5°	786.2	774.7	694.1	511.9	344.3	240.2	155.3	101.5	81.9	72.5	66.6
25°	883.1	883.5	775.2	535.4	323.8	199.2	108.8	80.6	69.1	62.3	57.2
27.5°	961.6	955.6	848.1	558.9	301.6	163.4	91.3	70.4	60.6	53.3	50.3
30°	1019.6	1010.6	896.3	575.1	273.0	138.2	81.9	67.0	57.2	49.1	45.2
32.5°	1079.3	1068.2	939.8	584.0	256.0	126.3	72.5	58.4	51.2	47.8	42.7
35°	1149.3	1139.5	988.0	583.2	247.0	119.5	65.7	52.9	43.5	38.0	34.6
37.5°	1227.4	1207.3	1037.9	579.3	240.6	116.0	59.7	49.1	40.5	34.6	30.3
40°	1294.3	1274.3	1084.0	574.2	236.3	112.6	56.3	46.5	38.4	32.0	27.7
42.5°	1346.8	1327.6	1127.1	567.8	234.2	105.4	58.0	44.8	36.7	30.3	25.6
45°	1392.0	1372.4	1178.3	567.0	233.4	100.3	57.2	44.4	35.8	28.2	23.9
47.5°	1444.5	1434.3	1245.7	581.0	229.9	96.4	52.5	47.8	35.4	27.3	22.6
50°	1522.2	1513.2	1334.0	622.9	224.8	92.6	47.8	52.5	35.4	26.4	21.3
52.5°	1630.9	1620.7	1473.1	677.5	220.1	88.3	43.1	50.8	35.8	25.2	20.5
55°	1743.6	1741.9	1604.5	735.5	215.9	78.9	38.0	45.6	35.0	23.5	19.2
57.5°	1831.9	1830.6	1703.0	774.7	207.8	63.6	34.6	38.0	32.4	21.3	17.5
60°	1868.1	1857.5	1713.7	774.7	189.0	52.5	31.6	29.9	32.8	19.2	15.4
61°	1868.1	1854.5	1694.5	763.2	179.6	49.9	29.9	27.7	33.7	18.3	14.5
62.5°	1853.6	1831.0	1628.8	721.8	164.7	49.9	27.3	24.7	30.7	17.5	13.2
65°	1789.2	1752.1	1474.8	627.5	149.3	51.2	23.5	20.9	22.2	14.9	11.5
67.5°	1630.1	1588.3	1275.1	496.6	136.9	54.2	19.6	18.3	17.1	13.2	10.2
70°	1343.0	1307.6	1040.5	372.0	127.1	55.0	17.1	15.4	14.5	11.5	9.0
72.5°	858.3	799.9	649.7	252.1	102.0	47.8	14.1	14.5	13.2	9.4	7.3
75°	414.7	430.9	378.0	127.1	68.7	31.1	11.1	11.9	10.7	8.5	6.4
77.5°	185.6	182.2	180.5	32.4	17.5	10.7	6.8	8.1	8.5	7.7	5.5
80°	19.2	26.0	15.4	9.8	6.4	4.7	3.8	4.3	5.1	5.5	3.0
82.5°	0.9	0.4	0.4	1.3	1.3	0.9	0.0	0.0	0.9	0.9	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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°	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8
2.5°	697.9	709.5	704.3	703.1	709.9	706.5	716.7	717.1	724.8	735.1	741.5
5°	548.6	539.7	557.6	569.5	584.5	579.8	597.7	595.6	605.4	621.6	615.2
7.5°	381.0	382.2	391.6	402.3	442.4	450.5	456.5	461.2	460.7	464.6	471.4
10°	291.4	284.1	277.7	292.7	308.4	325.9	328.5	334.9	317.4	324.7	328.1
12.5°	238.5	229.9	215.9	208.2	212.0	222.3	226.5	230.4	220.1	220.6	228.2
15°	180.9	169.4	163.8	153.6	149.7	148.9	151.0	145.5	144.2	139.5	142.5
17.5°	117.7	114.3	111.3	109.2	106.2	105.4	97.7	84.5	76.8	75.1	75.1
20°	78.5	75.9	75.9	80.2	78.9	75.5	65.3	54.2	48.6	46.9	47.8
22.5°	64.4	62.7	60.2	60.2	61.9	59.3	49.9	41.8	38.0	38.0	38.0
25°	55.9	55.0	52.5	49.9	50.8	48.6	40.5	35.4	32.8	32.4	32.8
27.5°	49.1	48.6	45.6	43.1	43.1	41.4	35.0	30.3	28.6	27.7	28.2
30°	44.4	43.5	40.1	38.0	37.5	35.8	29.9	26.4	24.7	24.3	24.3
32.5°	41.0	39.2	36.3	34.1	32.8	30.3	26.0	22.6	20.9	20.5	20.5
35°	32.8	32.8	31.6	30.3	28.6	24.7	21.8	18.8	17.1	16.6	16.6
37.5°	28.6	26.9	24.7	25.2	24.3	20.9	17.9	14.9	13.7	13.2	13.2
40°	26.0	23.9	20.9	19.6	20.1	18.3	14.9	11.5	9.8	10.2	9.8
42.5°	23.5	21.8	18.3	15.4	14.9	15.4	11.5	8.1	6.8	6.8	6.8
45°	21.8	20.1	16.2	12.8	10.7	11.9	9.0	5.5	4.3	4.3	4.3
47.5°	20.5	18.8	14.5	10.7	7.7	8.1	6.4	3.4	2.6	1.7	2.1
50°	19.6	17.5	13.2	8.5	5.5	4.7	4.3	1.7	0.4	0.4	0.0
52.5°	18.3	16.6	11.9	7.3	4.3	3.0	2.1	0.4	0.0	0.0	0.0
55°	17.5	15.4	10.7	6.4	3.4	1.7	0.4	0.0	0.0	0.0	0.0
57.5°	15.8	14.1	9.4	5.1	2.6	0.9	0.0	0.0	0.0	0.0	0.0
60°	14.1	12.8	8.1	3.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0
61°	13.2	11.9	7.7	3.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	12.4	11.1	6.8	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
65°	10.7	9.4	6.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	9.4	8.5	5.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	8.1	7.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	6.8	6.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.0	5.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.7	4.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8
2.5°	747.4	762.4	776.4	794.4	804.2	831.0	850.2	866.4	879.2	881.8	892.0
5°	632.2	653.1	666.8	704.3	725.2	770.0	804.6	845.5	882.2	902.3	920.6
7.5°	476.1	486.3	509.8	547.3	596.8	635.7	694.1	745.7	811.8	848.1	882.2
10°	336.2	345.6	380.1	419.4	464.6	529.9	600.7	668.5	735.5	782.0	822.1
12.5°	236.3	267.1	301.2	351.1	395.5	443.3	518.8	598.1	681.7	726.1	769.6
15°	155.3	182.6	229.9	292.7	348.1	394.6	465.0	558.0	664.2	713.7	755.1
17.5°	76.8	96.8	138.6	206.1	279.9	353.2	438.1	550.8	686.8	742.7	781.6
20°	48.2	54.2	69.5	116.5	201.4	309.7	418.1	565.3	748.3	810.1	835.3
22.5°	38.8	40.5	46.5	61.9	122.9	256.0	400.6	584.9	815.7	891.2	917.2
25°	33.3	34.6	38.0	45.6	71.2	192.0	379.3	619.4	894.2	985.5	991.9
27.5°	28.6	29.9	32.8	38.8	50.8	129.3	348.5	660.0	988.0	1068.2	1064.0
30°	24.3	26.0	29.0	33.3	40.1	87.5	291.4	700.9	1057.1	1121.6	1114.7
32.5°	20.9	22.2	24.7	28.6	33.3	60.2	218.9	727.8	1114.7	1171.9	1157.0
35°	17.1	18.3	20.5	23.9	26.9	42.7	165.5	728.7	1174.0	1234.2	1196.6
37.5°	13.7	14.5	16.6	19.6	22.2	33.3	121.6	714.6	1247.4	1315.2	1241.9
40°	10.2	11.5	13.7	16.2	18.8	28.2	90.9	680.4	1319.1	1396.3	1296.5
42.5°	6.8	8.5	10.7	13.2	17.9	22.6	64.0	623.7	1377.1	1468.4	1349.8
45°	4.3	5.5	8.1	11.1	18.3	17.9	42.7	555.9	1418.5	1523.4	1386.1
47.5°	2.1	3.4	6.0	10.7	16.2	13.2	26.4	491.0	1456.0	1555.4	1402.7
50°	0.4	1.3	4.3	13.2	13.7	9.8	17.5	450.5	1475.7	1547.3	1401.0
52.5°	0.0	0.0	3.0	12.8	9.8	7.7	13.7	444.5	1506.4	1558.0	1430.4
55°	0.0	0.0	1.3	5.5	5.5	6.4	11.9	436.4	1561.0	1621.6	1519.2
57.5°	0.0	0.0	0.0	2.6	3.4	5.1	11.1	415.1	1618.6	1689.0	1627.1
60°	0.0	0.0	0.0	1.3	2.1	4.3	9.8	366.5	1565.7	1689.4	1716.7
61°	0.0	0.0	0.0	1.3	1.7	3.8	9.0	349.4	1518.3	1662.1	1727.8
62.5°	0.0	0.0	0.0	0.4	1.3	3.0	7.7	315.7	1447.5	1618.1	1722.7
65°	0.0	0.0	0.0	0.0	0.4	1.7	6.0	255.1	1329.3	1507.6	1663.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.4	3.8	179.6	1159.5	1382.7	1537.9
70°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	104.1	934.3	1170.6	1317.4
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	47.4	606.2	904.0	1039.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.1	373.3	653.1	776.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	253.0	434.7	522.6
80°	0.0	0.9	0.4	0.0	0.0	0.0	0.0	3.4	155.7	271.3	294.8
82.5°	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	80.6	191.5	195.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.7	40.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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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CATALOG NUMBER: ENV-SA1B-727-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8	817.8
2.5°	901.4	904.0	905.7	902.7	884.4	874.1	853.7	831.0	823.4	821.2
5°	953.9	968.4	965.9	946.2	914.2	875.0	826.3	776.0	756.8	749.6
7.5°	943.7	981.6	988.9	968.4	914.2	845.5	775.2	715.4	687.7	680.4
10°	891.6	939.4	962.4	956.0	905.3	825.9	739.3	665.9	635.7	626.3
12.5°	841.3	887.4	901.9	907.0	879.2	810.6	721.4	642.5	610.9	599.0
15°	807.6	836.2	835.3	844.7	842.6	804.6	732.9	654.4	619.0	603.2
17.5°	796.5	788.0	776.9	784.5	799.5	806.3	770.5	697.1	655.7	637.4
20°	803.3	761.5	737.2	736.8	768.3	820.4	825.5	767.5	728.7	703.9
22.5°	838.3	748.3	710.7	711.6	750.4	841.3	889.1	859.6	817.0	786.2
25°	889.9	750.8	700.5	705.6	748.7	859.6	957.7	964.6	910.0	883.1
27.5°	942.4	773.0	700.9	706.5	756.0	869.4	997.0	1041.8	994.9	961.6
30°	979.1	800.3	708.6	714.6	767.5	877.1	1011.9	1105.4	1056.7	1019.6
32.5°	1013.6	828.5	721.0	726.9	790.5	892.9	1040.1	1169.3	1116.0	1079.3
35°	1047.3	856.2	744.0	754.7	827.6	921.5	1068.7	1244.4	1200.1	1149.3
37.5°	1076.3	886.9	783.7	806.3	878.0	965.4	1107.5	1329.8	1284.1	1227.4
40°	1100.7	923.2	865.6	890.8	954.8	1011.9	1150.6	1385.6	1355.3	1294.3
42.5°	1120.3	987.2	982.9	1018.3	1063.1	1065.3	1162.9	1412.5	1401.0	1346.8
45°	1153.1	1101.9	1136.9	1194.9	1192.0	1129.2	1159.5	1437.3	1438.1	1392.0
47.5°	1206.9	1245.7	1346.8	1386.1	1366.0	1216.7	1162.9	1461.6	1480.8	1444.5
50°	1283.7	1408.7	1540.9	1593.0	1534.5	1304.6	1193.2	1490.6	1548.6	1522.2
52.5°	1349.4	1532.0	1720.1	1766.6	1686.8	1398.4	1264.1	1553.3	1639.5	1630.9
55°	1443.2	1638.2	1847.7	1883.5	1819.5	1504.7	1359.2	1645.4	1739.3	1743.6
57.5°	1539.2	1734.2	1930.8	1967.1	1918.5	1636.9	1494.4	1777.7	1833.2	1831.9
60°	1645.9	1823.8	1968.4	1988.4	1960.7	1769.2	1639.9	1898.9	1897.6	1868.1
61°	1706.9	1852.4	1965.8	1971.8	1944.9	1808.0	1715.0	1945.4	1907.0	1868.1
62.5°	1774.3	1878.4	1934.3	1914.2	1885.2	1821.6	1823.8	1996.1	1913.4	1853.6
65°	1842.5	1813.1	1788.8	1692.8	1665.5	1696.2	1915.5	1976.9	1874.5	1789.2
67.5°	1725.6	1553.7	1501.2	1404.8	1296.9	1422.3	1828.5	1859.6	1743.6	1630.1
70°	1410.4	1141.6	1079.3	1075.9	998.3	1136.1	1612.6	1590.0	1447.1	1343.0
72.5°	1105.4	779.0	694.1	713.7	698.4	846.8	1319.1	1067.0	927.9	858.3
75°	866.4	553.7	477.8	474.4	457.8	576.8	965.9	562.3	464.2	414.7
77.5°	571.7	398.9	397.6	367.3	354.5	312.7	433.4	225.3	183.9	185.6
80°	329.3	244.4	286.7	227.4	227.8	183.4	175.3	32.8	26.4	19.2
82.5°	189.0	117.3	88.7	35.0	73.4	73.4	14.1	0.4	0.4	0.9
85°	18.3	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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