

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:

Luminaire Tested: **ENC-SA1C-740-U-T4W-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401340 AND P226775
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1C-740-U-T4W-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6284.9 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B1 - U5 - G1

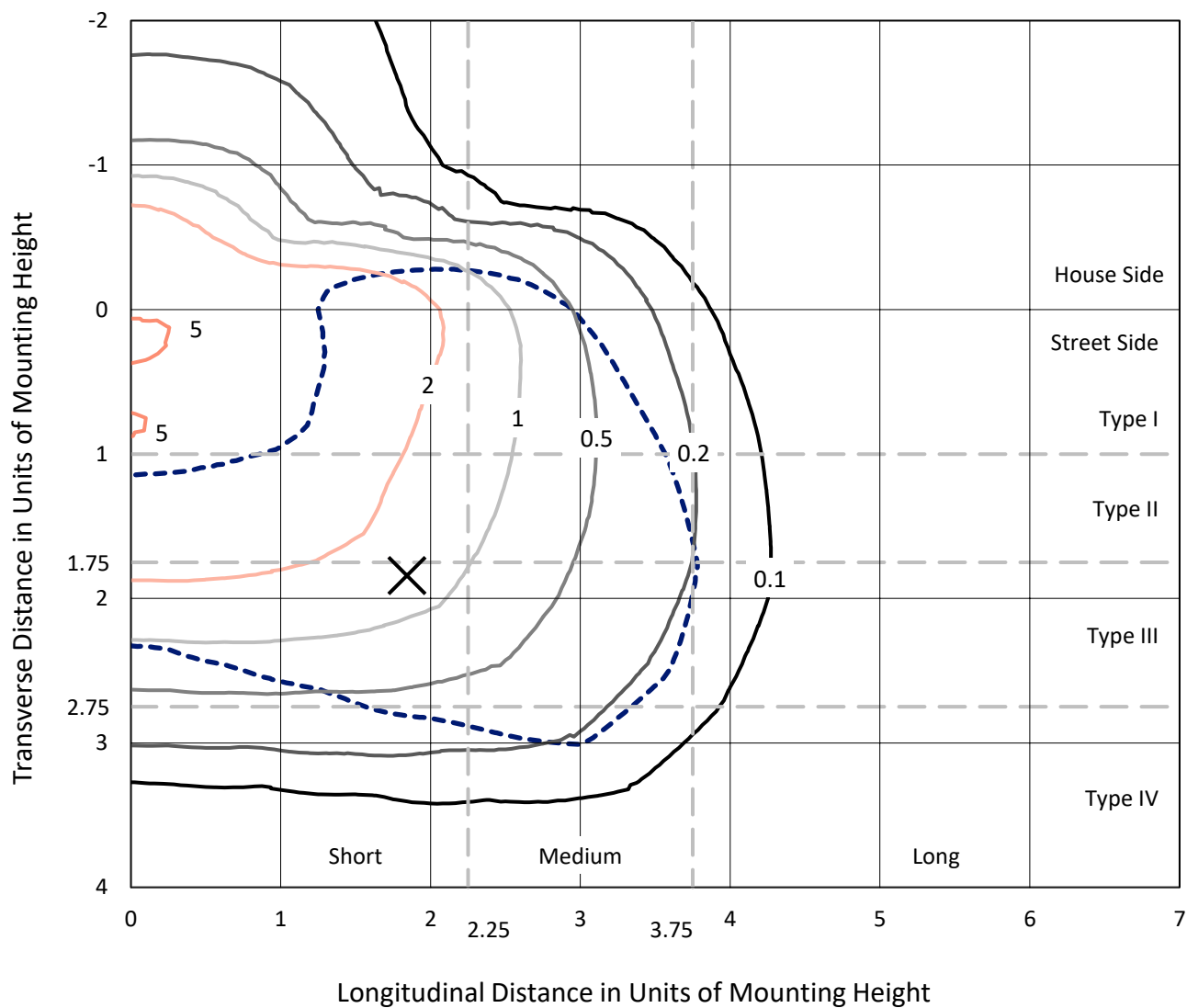
Input Watts (W): 50
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER:
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Iso-Footcandle Lines of Horizontal Illumination

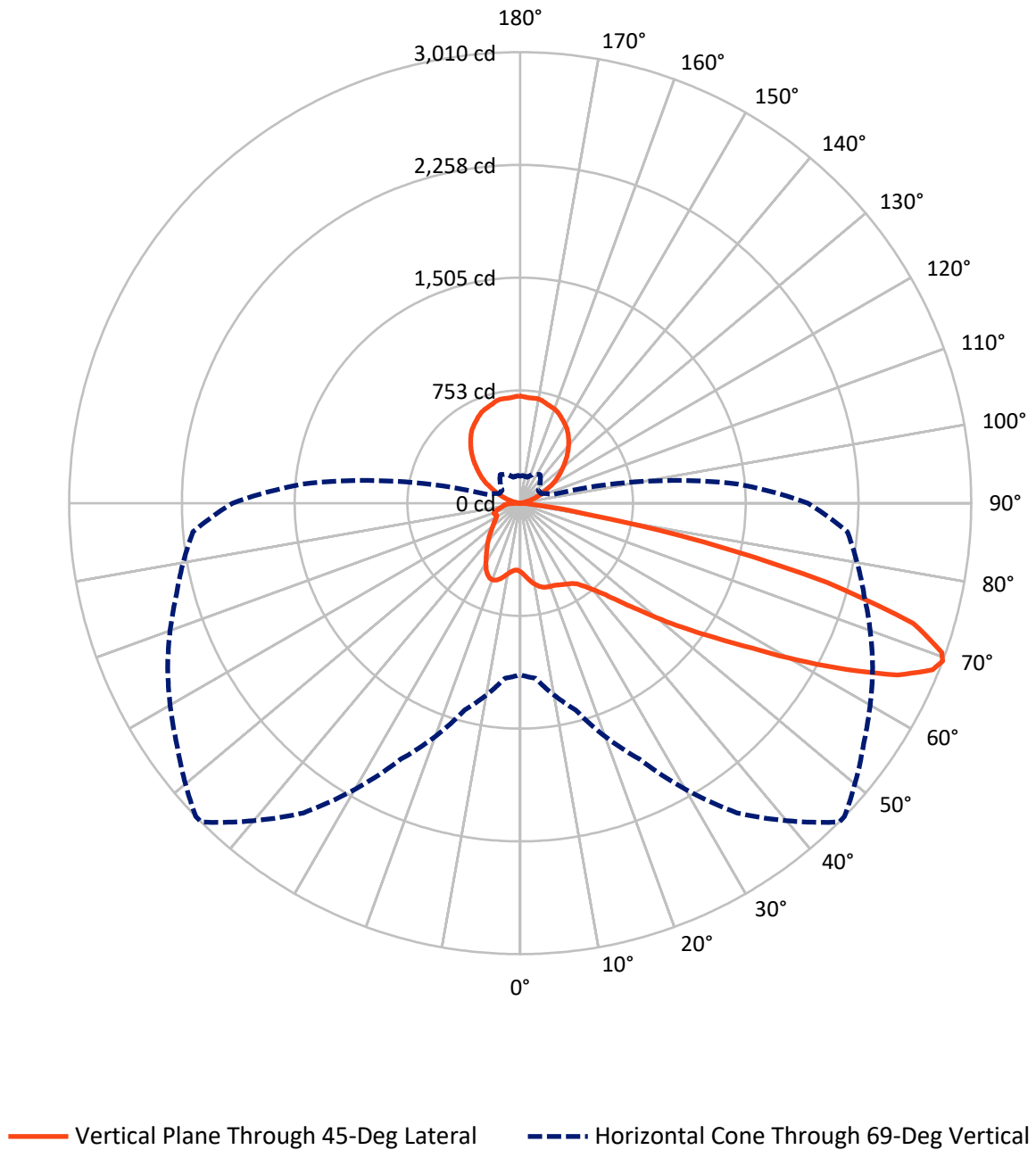
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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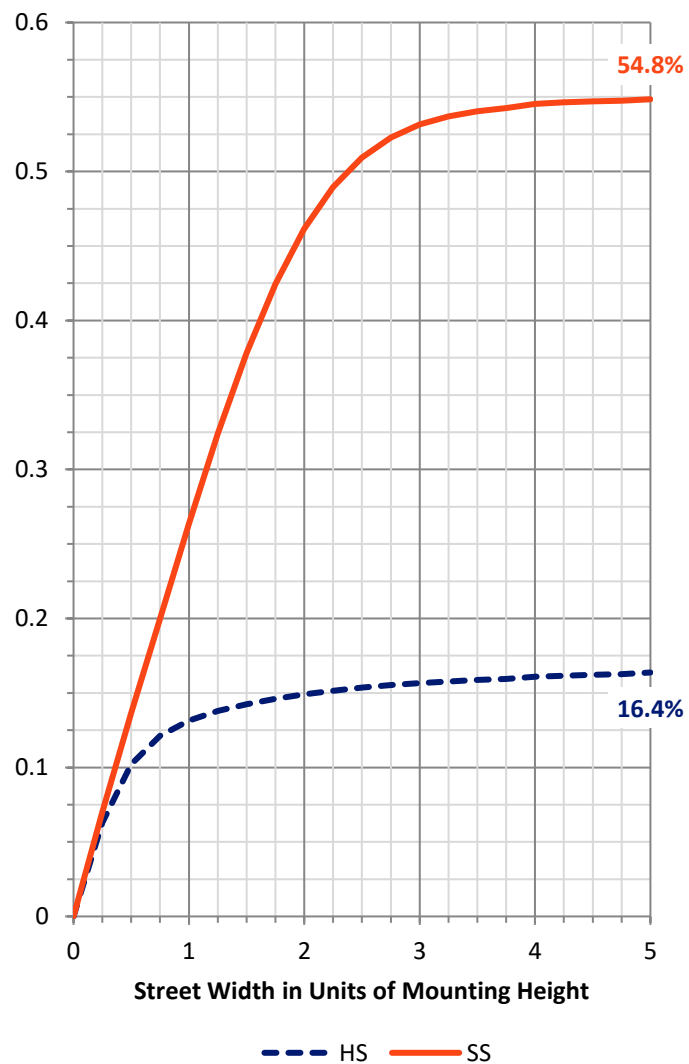
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1062.1	887.0	1949.0
	% Fixture	16.9	14.1	31.0
Street Side	Lumens	3448.9	887.0	4335.9
	% Fixture	54.9	14.1	69.0
Total	Lumens	4511.0	1773.9	6284.9
	% Fixture	71.8	28.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	0.7
10°-20°	154.6	2.5
20°-30°	261.2	4.2
30°-40°	378.0	6.0
40°-50°	570.7	9.1
50°-60°	962.4	15.3
60°-70°	1323.9	21.1
70°-80°	733.7	11.7
80°-90°	79.9	1.3
90°-100°	8.4	0.1
100°-110°	58.7	0.9
110°-120°	169.9	2.7
120°-130°	279.4	4.4
130°-140°	344.6	5.5
140°-150°	352.5	5.6
150°-160°	297.0	4.7
160°-170°	195.5	3.1
170°-180°	67.8	1.1
0°-90°	4511.0	71.8
0°-180°	6284.9	100.0

Coefficient of Utilization



REPORT NUMBER:

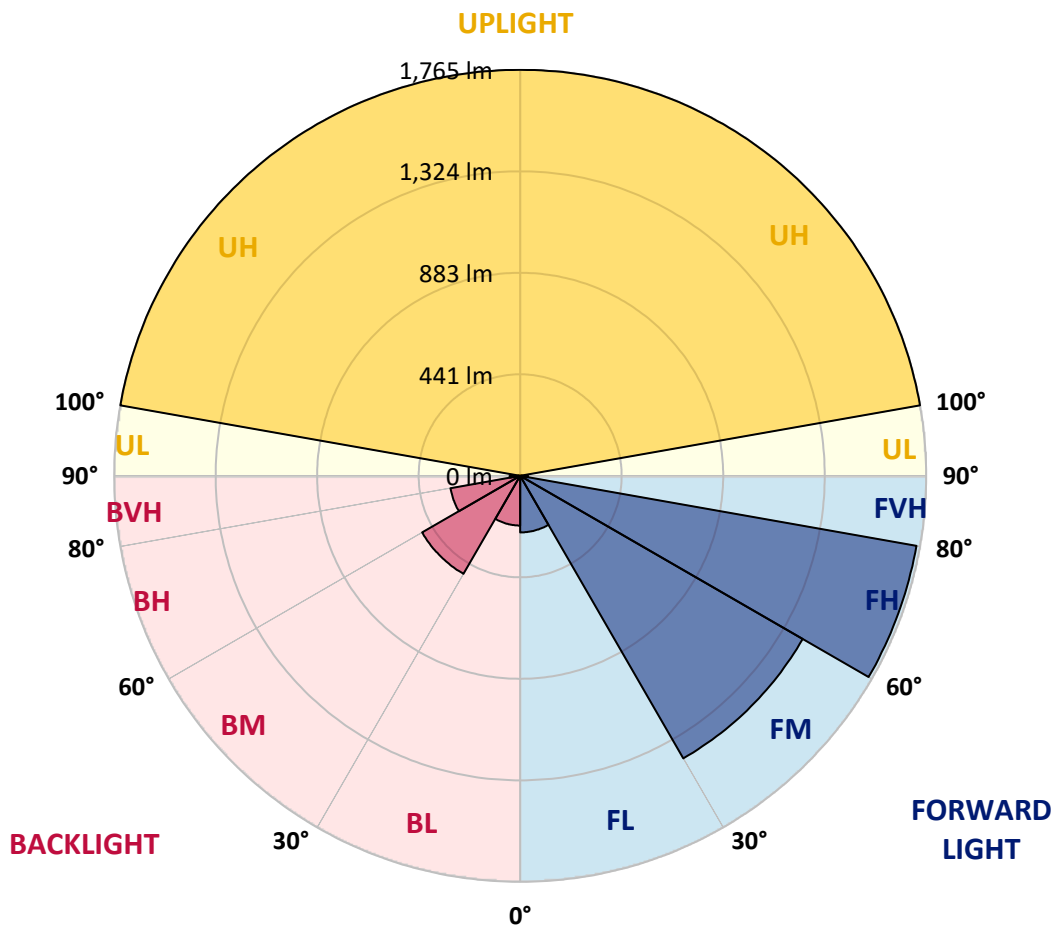
CATALOG NUMBER: ENC-SA1C-740-U-T4W-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	246.2	3.9			
FM	(30°-60°)	1418.8	22.6			
FH	(60°-80°)	1749.8	27.8			G1/1800
FVH	(80°-90°)	34.2	0.5			G1/100
BL	(0°-30°)	216.2	3.4	B1/500		
BM	(30°-60°)	492.3	7.8	B1/1000		
BH	(60°-80°)	307.8	4.9	B1/500		G1/500
BVH	(80°-90°)	45.7	0.7			G1/100
UL	(90°-100°)	8.4	0.1		U1/10	
UH	(100°-180°)	1765.5	28.1		U5	

BUG Rating: B1-U5-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	486.7	486.1	486.7	484.2	481.6	477.8	476.5	472.0	468.8	464.3	460.4
5°	522.6	524.6	523.9	520.7	510.5	502.8	502.8	493.1	482.9	473.3	464.3
7.5°	561.8	561.8	557.9	551.5	541.2	529.7	528.4	515.6	500.8	487.4	473.3
10°	590.0	591.3	585.5	576.5	563.7	551.5	550.2	535.5	521.4	504.0	486.7
12.5°	609.9	609.9	604.7	596.4	581.0	569.5	568.2	554.7	540.0	522.0	502.1
15°	620.1	618.8	614.4	605.4	591.9	582.3	580.4	568.8	556.6	538.7	517.5
17.5°	618.2	618.2	614.4	605.4	595.8	588.1	586.8	578.4	569.5	552.1	531.0
20°	609.9	609.2	607.9	600.9	594.5	591.3	590.0	586.1	580.4	565.6	545.7
22.5°	602.2	601.5	599.6	595.1	592.5	594.5	594.5	593.8	593.2	581.6	562.4
25°	606.7	606.0	602.2	595.8	595.1	604.1	604.7	606.7	607.9	598.3	578.4
27.5°	638.1	636.2	625.3	608.6	602.8	614.4	615.6	621.4	620.1	609.9	592.5
30°	699.6	700.3	675.9	640.0	620.8	625.9	626.5	632.9	631.0	622.7	608.6
32.5°	792.6	792.6	752.9	698.4	649.6	639.4	637.4	643.2	650.9	640.0	625.9
35°	910.6	907.4	859.3	775.3	699.0	662.4	661.2	658.6	672.1	661.8	641.3
37.5°	1029.3	1017.7	970.9	878.6	768.3	707.3	702.2	694.5	702.2	680.4	662.4
40°	1124.8	1122.9	1084.4	990.8	850.3	761.8	758.0	724.0	729.1	711.8	704.8
42.5°	1230.0	1231.3	1205.6	1111.3	948.5	835.6	825.3	772.7	787.5	781.1	777.9
45°	1345.4	1344.1	1324.9	1226.1	1068.4	938.2	925.4	860.6	890.7	886.9	904.9
47.5°	1433.9	1441.0	1430.1	1360.2	1210.7	1062.6	1053.0	974.1	1019.6	1050.4	1084.4
50°	1554.5	1553.8	1524.3	1495.5	1376.2	1221.6	1212.0	1124.2	1189.6	1234.5	1296.7
52.5°	1703.9	1698.8	1637.8	1627.6	1577.6	1395.4	1387.1	1295.4	1389.0	1428.1	1554.5
55°	1797.5	1796.9	1765.5	1783.4	1784.7	1589.1	1578.8	1497.4	1603.2	1648.1	1839.2
57.5°	1875.8	1876.4	1902.7	1965.5	2007.9	1824.5	1820.6	1721.2	1828.3	1891.1	2116.9
60°	1936.0	1948.9	2022.6	2166.3	2236.8	2124.6	2107.9	2002.7	2074.6	2099.6	2329.1
62.5°	1911.7	1928.3	2073.3	2284.9	2466.4	2442.7	2436.9	2284.9	2284.3	2271.4	2487.5
65°	1719.3	1755.2	1983.5	2280.4	2617.7	2765.9	2757.5	2551.0	2479.2	2415.1	2535.0
67.5°	1407.0	1414.7	1689.8	2106.0	2616.4	2969.1	2960.2	2744.7	2600.4	2443.3	2395.8
69°	1145.3	1173.6	1428.1	1885.4	2524.1	3010.2	3010.2	2798.6	2595.9	2376.0	2191.9
70°	990.8	992.1	1237.7	1709.7	2398.4	2985.8	2991.6	2798.6	2559.4	2288.1	2011.1
72.5°	464.3	493.1	648.3	1115.8	1937.3	2744.7	2758.8	2613.9	2347.1	1971.3	1508.9
75°	139.2	144.3	216.1	529.1	1110.1	2114.3	2145.7	2174.6	1911.7	1451.2	929.2
77.5°	82.7	82.1	104.5	179.6	513.7	1253.7	1267.8	1390.9	1240.2	806.7	422.0
80°	40.4	41.7	55.8	87.2	192.4	455.3	500.8	650.3	549.6	315.5	154.5
82.5°	13.5	14.7	23.1	35.3	81.4	146.9	162.2	203.9	175.7	114.8	66.1
85°	0.0	0.0	0.6	1.3	4.5	10.9	10.9	24.4	36.6	40.4	21.8
87.5°	0.0	0.0	0.6	0.6	1.3	1.3	1.3	1.3	1.3	1.3	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	6.2	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.2	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	9.5	12.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	22.3	29.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	41.9	51.1	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	65.3	73.7	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	90.7	97.2	96.2	92.1	89.0

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CATALOG NUMBER: ENC-SA1C-740-U-T4W-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	117.2	122.8	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	146.8	151.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	178.5	183.1	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	210.3	215.8	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	248.9	251.6	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	283.6	285.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	317.4	320.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	348.3	352.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	381.0	385.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	414.9	420.4	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	447.6	453.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	479.2	483.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	508.7	511.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	537.2	539.1	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	564.1	568.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	588.7	593.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	607.0	610.7	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	624.1	625.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	642.2	640.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	659.7	658.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	670.3	673.1	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	678.6	682.3	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	688.3	687.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	700.0	693.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	706.4	701.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	705.7	704.8	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	705.8	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	710.9	709.9	715.0	717.1	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

REPORT NUMBER:

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	458.5	457.2	454.7	452.1	450.8	447.6	448.3	447.0	446.3	446.3	447.0
5°	459.8	457.9	454.0	451.5	448.9	447.6	450.8	452.1	453.4	453.4	454.0
7.5°	467.5	463.6	459.2	456.0	456.6	458.5	463.6	467.5	469.4	470.7	472.0
10°	480.3	475.8	469.4	468.8	470.1	475.2	482.2	488.0	493.1	496.4	496.4
12.5°	493.8	488.0	482.9	484.2	489.9	497.6	504.7	511.1	515.6	518.8	519.4
15°	508.5	502.8	497.6	500.8	510.5	519.4	525.9	528.4	530.3	533.5	534.2
17.5°	522.0	516.9	512.4	520.7	529.1	536.1	538.0	536.8	534.2	536.1	537.4
20°	536.1	531.6	529.1	538.0	543.8	544.5	539.3	533.5	527.1	527.1	527.8
22.5°	553.4	547.7	546.4	550.9	548.9	541.2	528.4	519.4	510.5	509.2	511.1
25°	570.1	564.3	563.7	560.5	543.8	523.9	506.6	496.4	489.3	489.9	493.8
27.5°	586.8	582.9	583.6	566.3	529.1	498.9	475.8	467.5	469.4	470.7	474.6
30°	603.4	603.4	606.0	566.3	508.5	463.6	441.8	441.2	446.3	450.2	454.7
32.5°	622.7	628.5	624.0	559.2	481.0	427.7	410.4	411.7	417.5	423.9	427.7
35°	641.3	654.8	641.9	543.2	443.1	395.0	380.9	379.0	383.5	389.3	391.2
37.5°	670.8	692.6	657.3	518.2	404.0	366.2	352.1	346.9	342.4	346.9	346.3
40°	722.1	748.4	668.9	476.5	366.2	339.2	324.5	314.9	304.0	294.3	294.3
42.5°	804.2	821.5	675.3	425.8	328.3	312.3	297.6	283.4	266.8	249.5	249.5
45°	938.2	942.0	677.8	371.9	293.7	285.4	270.0	256.5	234.7	217.4	213.5
47.5°	1117.1	1100.4	684.3	320.0	263.6	261.6	248.8	233.4	209.7	193.7	191.7
50°	1357.6	1285.8	712.5	278.3	239.2	241.1	231.5	213.5	191.1	179.6	177.0
52.5°	1628.2	1519.8	734.3	245.0	218.0	223.8	216.8	199.4	180.2	170.6	168.7
55°	1923.9	1744.9	729.1	222.5	202.0	208.4	205.9	191.1	173.8	165.5	163.5
57.5°	2165.0	1903.3	684.3	202.6	186.0	195.0	197.5	186.0	169.9	162.2	160.3
60°	2345.8	1989.9	591.9	186.0	173.1	184.0	191.1	182.8	169.3	164.8	162.9
62.5°	2427.9	1982.2	472.0	173.1	163.5	176.4	191.7	187.9	178.9	182.1	182.8
65°	2381.7	1885.4	354.0	163.5	157.8	177.6	202.6	202.6	189.2	195.0	195.6
67.5°	2145.1	1632.1	257.8	156.5	152.0	184.0	223.2	210.3	184.7	189.2	187.3
69°	1920.0	1460.2	221.2	152.6	147.5	187.3	232.1	211.6	179.6	184.7	179.6
70°	1754.6	1305.0	198.8	149.4	145.6	187.3	234.7	210.3	177.0	180.8	175.1
72.5°	1248.6	906.1	163.5	143.0	138.5	173.1	230.2	203.3	169.9	165.5	154.5
75°	725.9	500.8	139.2	136.0	122.5	152.0	218.7	195.6	162.9	154.5	146.9
77.5°	304.6	223.8	118.6	123.8	108.4	135.3	204.6	187.9	154.5	143.0	139.2
80°	123.8	111.6	98.8	107.1	94.3	119.3	188.5	175.1	142.4	130.8	125.1
82.5°	64.8	61.6	75.7	86.6	78.2	109.7	177.6	166.1	132.1	120.6	113.5
85°	19.2	25.7	43.0	59.0	59.6	98.8	172.5	153.9	114.8	99.4	98.1
87.5°	1.3	5.1	14.7	30.8	39.1	75.7	139.8	126.3	93.0	78.2	78.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9

REPORT NUMBER:

CATALOG NUMBER: ENC-SA1C-740-U-T4W-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)