

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-SA1E-740-U-T4FT-ULG**

Issue Date: 3/30/2022

Test Information

Test Method: LM-79-08
Report Number: REPORT IS A COMBINATION OF REPORTS P401696 AND P226775
Test Lab: INNOVATION CENTER
Issue Date: 3/30/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1E-740-U-T4FT-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8508.9 lumens
Efficiency: N/A
Efficacy: 115.1 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 - G2

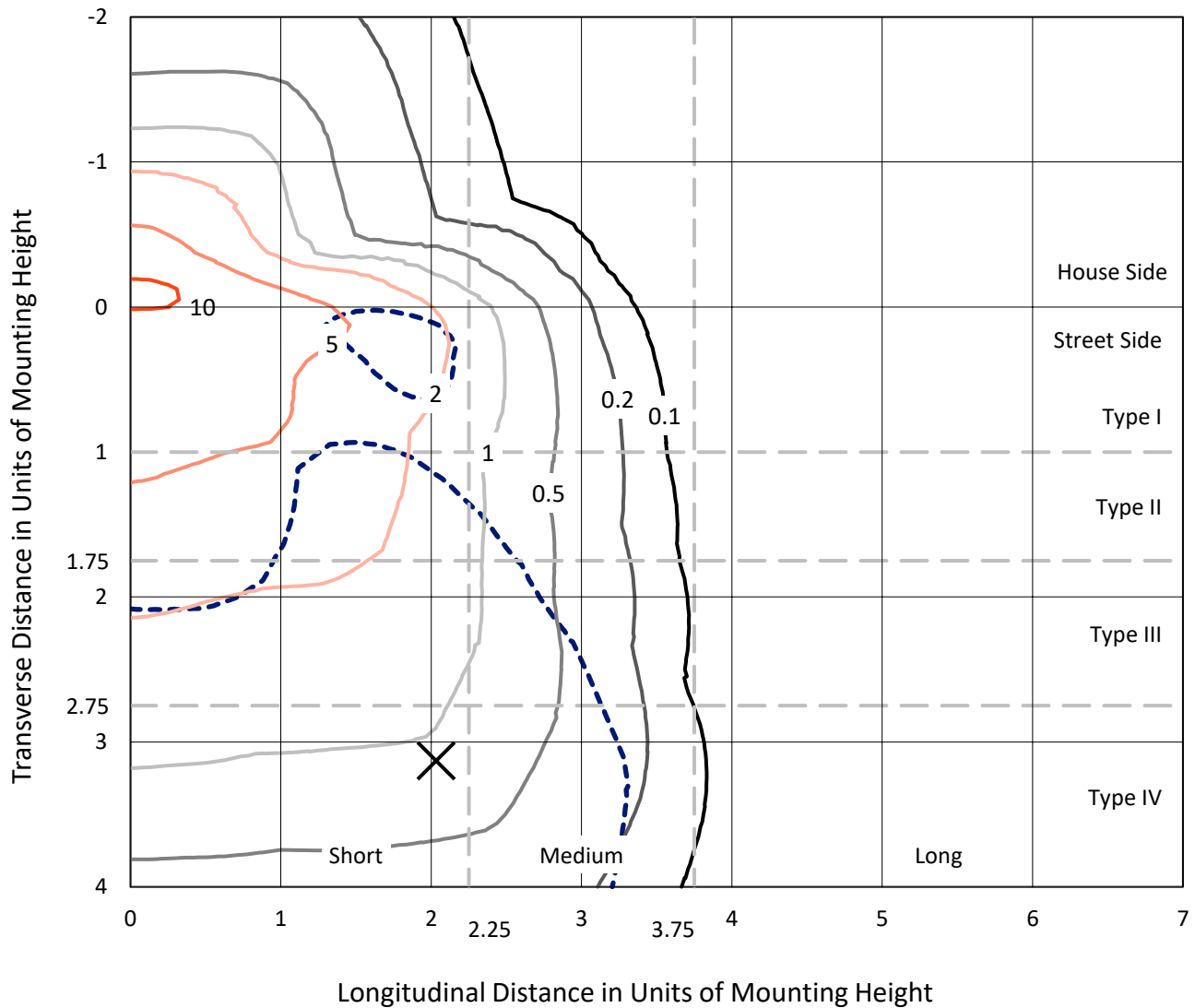
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER:
CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

Iso-Footcandle Lines of Horizontal Illumination

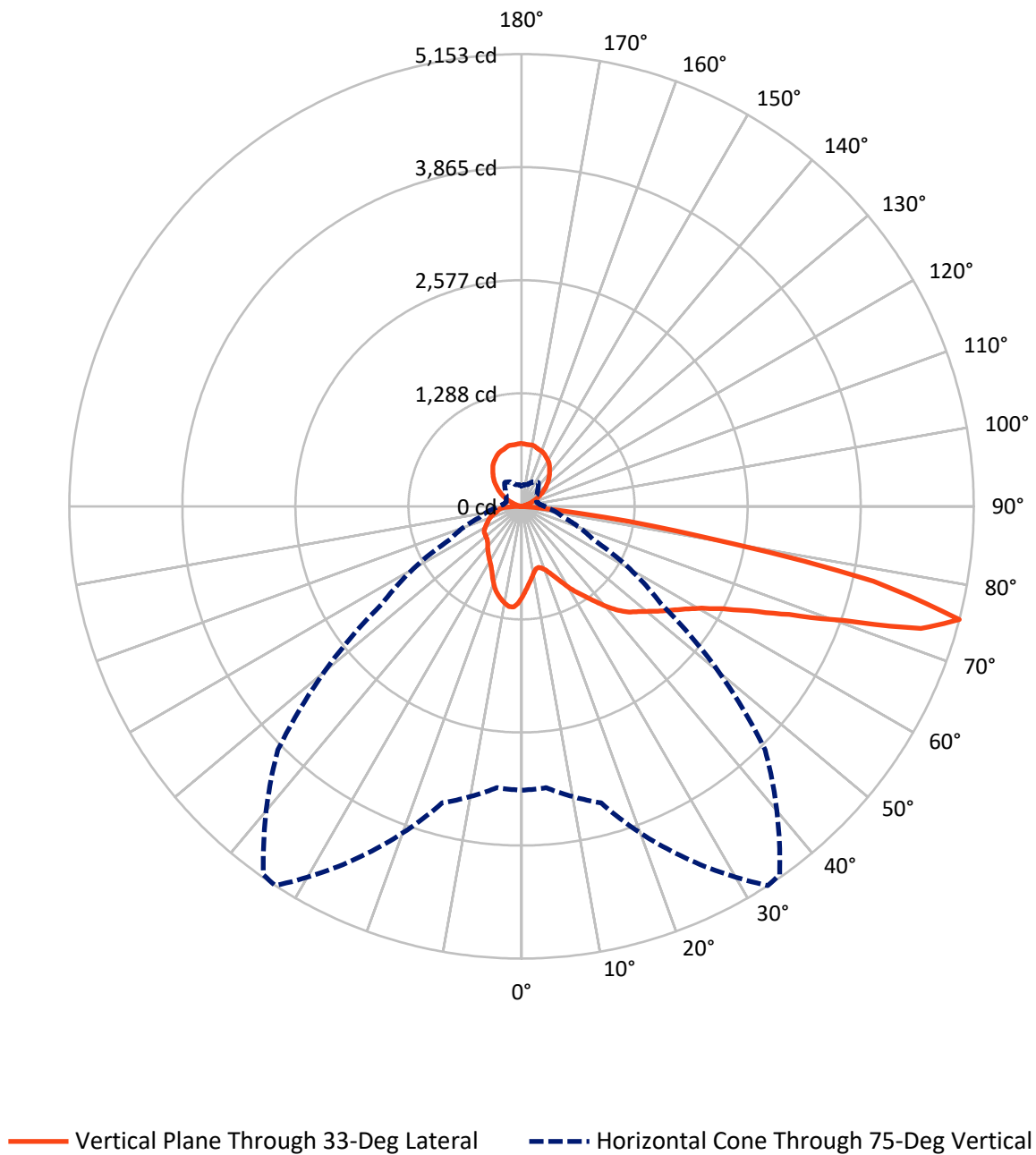
× Max cd
--- 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11 fc
Type IV - Short - N/A

REPORT NUMBER:
CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

Luminous Intensity Polar Plot



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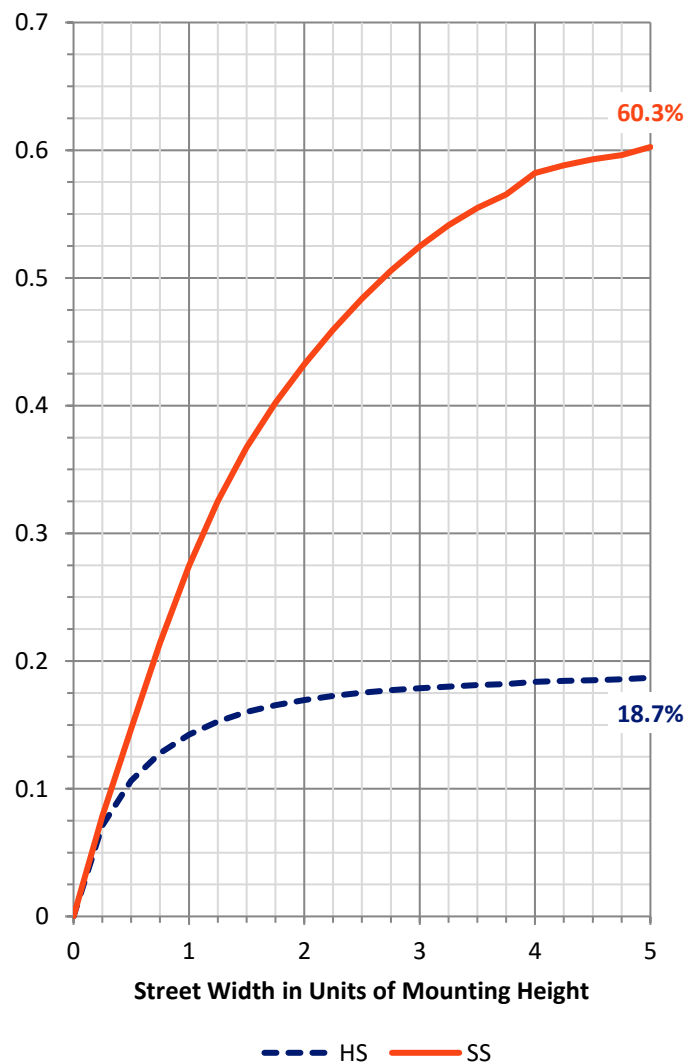
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1636.1	887.0	2523.1
	% Fixture	19.2	10.4	29.7
Street Side	Lumens	5098.9	887.0	5985.8
	% Fixture	59.9	10.4	70.3
Total	Lumens	6735.0	1773.9	8508.9
	% Fixture	79.2	20.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.1
10°-20°	271.2	3.2
20°-30°	450.9	5.3
30°-40°	672.6	7.9
40°-50°	939.6	11.0
50°-60°	1254.3	14.7
60°-70°	1555.2	18.3
70°-80°	1344.6	15.8
80°-90°	150.3	1.8
90°-100°	8.4	0.1
100°-110°	58.7	0.7
110°-120°	169.9	2.0
120°-130°	279.4	3.3
130°-140°	344.6	4.0
140°-150°	352.5	4.1
150°-160°	297.0	3.5
160°-170°	195.5	2.3
170°-180°	67.8	0.8
0°-90°	6735.0	79.2
0°-180°	8508.9	100.0

Coefficient of Utilization



REPORT NUMBER:

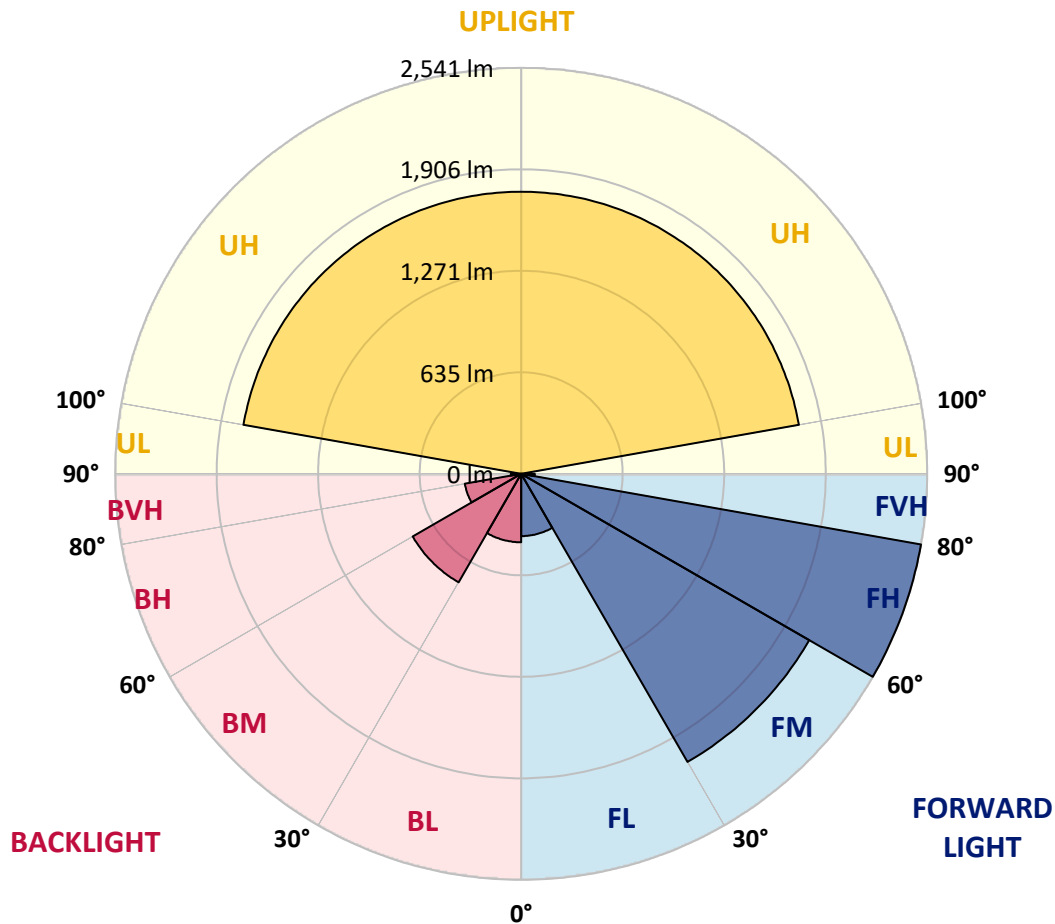
CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	389.9	4.6			
FM	(30°-60°)	2082.5	24.5			
FH	(60°-80°)	2541.5	29.9			G2/5000
FVH	(80°-90°)	84.9	1.0			G1/100
BL	(0°-30°)	428.5	5.0	B1/500		
BM	(30°-60°)	784.0	9.2	B1/1000		
BH	(60°-80°)	358.3	4.2	B1/500		G1/500
BVH	(80°-90°)	65.4	0.8			G1/100
UL	(90°-100°)	8.4	0.1		U1/10	
UH	(100°-180°)	1765.5	20.7		U5	

BUG Rating: B1-U5-G2

Type IV Short



REPORT NUMBER:

CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0
2.5°	936.0	938.0	944.0	951.0	955.0	955.0	966.0	979.0	995.0	1009.0	1024.0
5°	858.0	861.0	866.0	875.0	886.0	888.0	910.0	933.0	962.0	993.0	1023.0
7.5°	781.0	787.0	797.0	809.0	826.0	830.0	861.0	892.0	932.0	979.0	1028.0
10°	722.0	726.0	731.0	748.0	769.0	776.0	817.0	856.0	911.0	969.0	1034.0
12.5°	706.0	706.0	706.0	714.0	731.0	737.0	780.0	830.0	892.0	962.0	1043.0
15°	729.0	728.0	717.0	711.0	721.0	726.0	763.0	812.0	882.0	964.0	1060.0
17.5°	781.0	778.0	752.0	732.0	739.0	742.0	766.0	808.0	879.0	972.0	1085.0
20°	849.0	842.0	802.0	772.0	771.0	773.0	791.0	820.0	884.0	986.0	1112.0
22.5°	939.0	935.0	876.0	830.0	822.0	822.0	830.0	848.0	897.0	1002.0	1149.0
25°	1055.0	1044.0	973.0	911.0	893.0	888.0	887.0	887.0	920.0	1026.0	1195.0
27.5°	1174.0	1161.0	1089.0	1005.0	981.0	972.0	956.0	944.0	950.0	1052.0	1250.0
30°	1281.0	1263.0	1202.0	1115.0	1079.0	1065.0	1036.0	1011.0	995.0	1088.0	1323.0
32.5°	1340.0	1333.0	1291.0	1212.0	1171.0	1165.0	1117.0	1084.0	1056.0	1135.0	1421.0
35°	1419.0	1410.0	1383.0	1318.0	1269.0	1254.0	1218.0	1179.0	1134.0	1198.0	1545.0
37.5°	1492.0	1487.0	1477.0	1432.0	1380.0	1365.0	1332.0	1291.0	1230.0	1291.0	1684.0
40°	1566.0	1560.0	1556.0	1540.0	1503.0	1493.0	1477.0	1429.0	1347.0	1393.0	1821.0
42.5°	1674.0	1661.0	1619.0	1618.0	1621.0	1629.0	1630.0	1577.0	1475.0	1520.0	1941.0
45°	1815.0	1779.0	1685.0	1682.0	1717.0	1738.0	1789.0	1744.0	1608.0	1650.0	2075.0
47.5°	1887.0	1850.0	1753.0	1747.0	1793.0	1824.0	1950.0	1906.0	1746.0	1796.0	2214.0
50°	1922.0	1898.0	1813.0	1832.0	1879.0	1909.0	2103.0	2068.0	1889.0	1954.0	2389.0
52.5°	1971.0	1931.0	1871.0	1911.0	1981.0	2012.0	2240.0	2234.0	2010.0	2126.0	2581.0
55°	1954.0	1933.0	1944.0	1998.0	2086.0	2132.0	2378.0	2378.0	2133.0	2310.0	2771.0
57.5°	1968.0	1954.0	2045.0	2093.0	2204.0	2270.0	2544.0	2500.0	2237.0	2464.0	2899.0
60°	2087.0	2047.0	2118.0	2213.0	2356.0	2420.0	2734.0	2628.0	2322.0	2597.0	2922.0
62.5°	2297.0	2265.0	2272.0	2381.0	2566.0	2640.0	2922.0	2741.0	2379.0	2653.0	2836.0
65°	2645.0	2630.0	2544.0	2610.0	2865.0	2932.0	3157.0	2839.0	2363.0	2611.0	2609.0
67.5°	3113.0	3053.0	2937.0	2996.0	3290.0	3358.0	3440.0	2876.0	2259.0	2360.0	2097.0
70°	3501.0	3451.0	3398.0	3553.0	3891.0	3928.0	3735.0	2841.0	2006.0	1847.0	1406.0
72.5°	3748.0	3712.0	3761.0	4217.0	4758.0	4688.0	4026.0	2596.0	1565.0	1131.0	703.0
75°	3235.0	3218.0	3498.0	4423.0	5153.0	5127.0	3925.0	1943.0	908.0	498.0	320.0
77.5°	1627.0	1812.0	2107.0	3138.0	4100.0	4105.0	2860.0	934.0	382.0	279.0	220.0
80°	458.0	464.0	703.0	1294.0	2047.0	2181.0	1082.0	317.0	218.0	208.0	164.0
82.5°	109.0	101.0	180.0	383.0	687.0	715.0	325.0	114.0	122.0	130.0	101.0
85°	1.0	1.0	1.0	1.0	1.0	2.0	12.0	12.0	29.0	37.0	29.0
87.5°	0.0	0.0	0.0	1.0	1.0	1.0	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
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	6.1	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	9.0	9.2	9.2	12.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	11.9	12.3	21.5	29.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	25.8	27.6	40.9	51.1	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	46.6	49.1	64.4	73.7	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	71.6	74.7	90.0	97.2	96.2	92.1	89.0
110°	67.5	69.6	75.7	89.0	101.2	104.3	116.6	122.8	123.8	121.7	118.7

REPORT NUMBER:

CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
112.5°	101.3	101.3	108.4	123.8	134.4	137.1	146.3	151.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	170.0	171.9	178.0	183.1	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	205.6	206.6	209.7	215.8	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	241.6	242.4	248.6	251.6	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	276.4	277.2	283.4	285.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	310.8	312.0	317.1	320.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	345.6	346.8	347.8	352.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	377.7	378.5	380.5	385.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	412.7	413.3	414.3	420.4	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	444.4	445.0	447.0	453.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	473.8	474.6	478.7	483.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	501.9	502.3	508.4	511.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	532.4	533.0	537.0	539.1	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.0	562.6	563.6	568.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	587.2	588.2	593.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	606.6	610.7	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	623.8	624.0	624.0	625.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	643.9	644.5	642.4	640.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.4	660.8	659.8	658.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.2	670.0	670.0	673.1	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	677.0	676.2	678.2	682.3	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	689.0	688.4	688.4	687.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.4	703.8	700.7	693.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.7	708.9	706.9	701.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	706.4	705.8	705.8	704.8	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	707.7	706.9	705.8	705.8	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.4	713.0	711.0	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:

CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0	1032.0
2.5°	1031.0	1041.0	1057.0	1071.0	1083.0	1092.0	1106.0	1108.0	1112.0	1114.0	1116.0
5°	1040.0	1059.0	1089.0	1115.0	1133.0	1138.0	1150.0	1149.0	1150.0	1150.0	1149.0
7.5°	1052.0	1078.0	1120.0	1149.0	1159.0	1156.0	1153.0	1142.0	1133.0	1129.0	1124.0
10°	1067.0	1097.0	1146.0	1167.0	1162.0	1146.0	1127.0	1107.0	1091.0	1083.0	1081.0
12.5°	1082.0	1121.0	1167.0	1173.0	1153.0	1124.0	1092.0	1070.0	1049.0	1038.0	1038.0
15°	1107.0	1150.0	1184.0	1172.0	1136.0	1099.0	1055.0	1025.0	1001.0	986.0	985.0
17.5°	1137.0	1183.0	1202.0	1167.0	1115.0	1063.0	1010.0	971.0	940.0	925.0	916.0
20°	1174.0	1217.0	1211.0	1151.0	1084.0	1020.0	954.0	907.0	875.0	859.0	856.0
22.5°	1216.0	1252.0	1214.0	1125.0	1042.0	960.0	888.0	841.0	820.0	808.0	809.0
25°	1267.0	1295.0	1215.0	1094.0	982.0	881.0	818.0	796.0	793.0	788.0	790.0
27.5°	1331.0	1340.0	1211.0	1052.0	905.0	798.0	761.0	770.0	778.0	775.0	777.0
30°	1407.0	1394.0	1202.0	991.0	810.0	722.0	724.0	744.0	755.0	752.0	753.0
32.5°	1496.0	1448.0	1185.0	917.0	720.0	676.0	692.0	712.0	723.0	723.0	724.0
35°	1596.0	1513.0	1152.0	821.0	657.0	648.0	662.0	678.0	685.0	681.0	684.0
37.5°	1701.0	1569.0	1099.0	714.0	610.0	626.0	634.0	638.0	637.0	631.0	628.0
40°	1799.0	1613.0	1004.0	608.0	571.0	603.0	607.0	596.0	583.0	572.0	565.0
42.5°	1874.0	1636.0	872.0	531.0	534.0	577.0	580.0	558.0	533.0	516.0	512.0
45°	1951.0	1644.0	741.0	469.0	494.0	551.0	559.0	529.0	495.0	475.0	472.0
47.5°	2039.0	1664.0	612.0	426.0	460.0	533.0	546.0	509.0	471.0	441.0	436.0
50°	2157.0	1702.0	515.0	393.0	436.0	524.0	542.0	493.0	445.0	412.0	408.0
52.5°	2307.0	1758.0	425.0	367.0	417.0	510.0	536.0	477.0	426.0	386.0	380.0
55°	2436.0	1779.0	367.0	345.0	397.0	493.0	531.0	471.0	405.0	360.0	353.0
57.5°	2495.0	1719.0	326.0	323.0	376.0	472.0	521.0	451.0	382.0	347.0	341.0
60°	2468.0	1570.0	295.0	303.0	352.0	445.0	495.0	431.0	366.0	337.0	331.0
62.5°	2348.0	1398.0	272.0	284.0	325.0	411.0	465.0	413.0	352.0	326.0	318.0
65°	2137.0	1209.0	255.0	267.0	301.0	378.0	441.0	392.0	336.0	310.0	303.0
67.5°	1744.0	962.0	237.0	250.0	281.0	351.0	419.0	375.0	318.0	301.0	295.0
70°	1154.0	647.0	220.0	233.0	261.0	325.0	396.0	357.0	301.0	290.0	282.0
72.5°	530.0	348.0	202.0	215.0	238.0	296.0	367.0	330.0	278.0	271.0	259.0
75°	262.0	214.0	180.0	192.0	210.0	261.0	333.0	307.0	257.0	245.0	231.0
77.5°	191.0	160.0	155.0	167.0	182.0	231.0	297.0	283.0	236.0	219.0	211.0
80°	142.0	124.0	130.0	142.0	156.0	209.0	278.0	265.0	218.0	201.0	195.0
82.5°	87.0	83.0	100.0	114.0	131.0	192.0	265.0	242.0	196.0	180.0	173.0
85°	25.0	30.0	51.0	74.0	93.0	155.0	247.0	212.0	165.0	138.0	133.0
87.5°	0.0	3.0	16.0	34.0	55.0	103.0	190.0	166.0	126.0	102.0	98.0
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
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5

REPORT NUMBER:

CATALOG NUMBER: ENC-SA1E-740-U-T4FT-ULG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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)