

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P628357

Luminaire Tested: **IFLD-S-SA2E-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628357
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

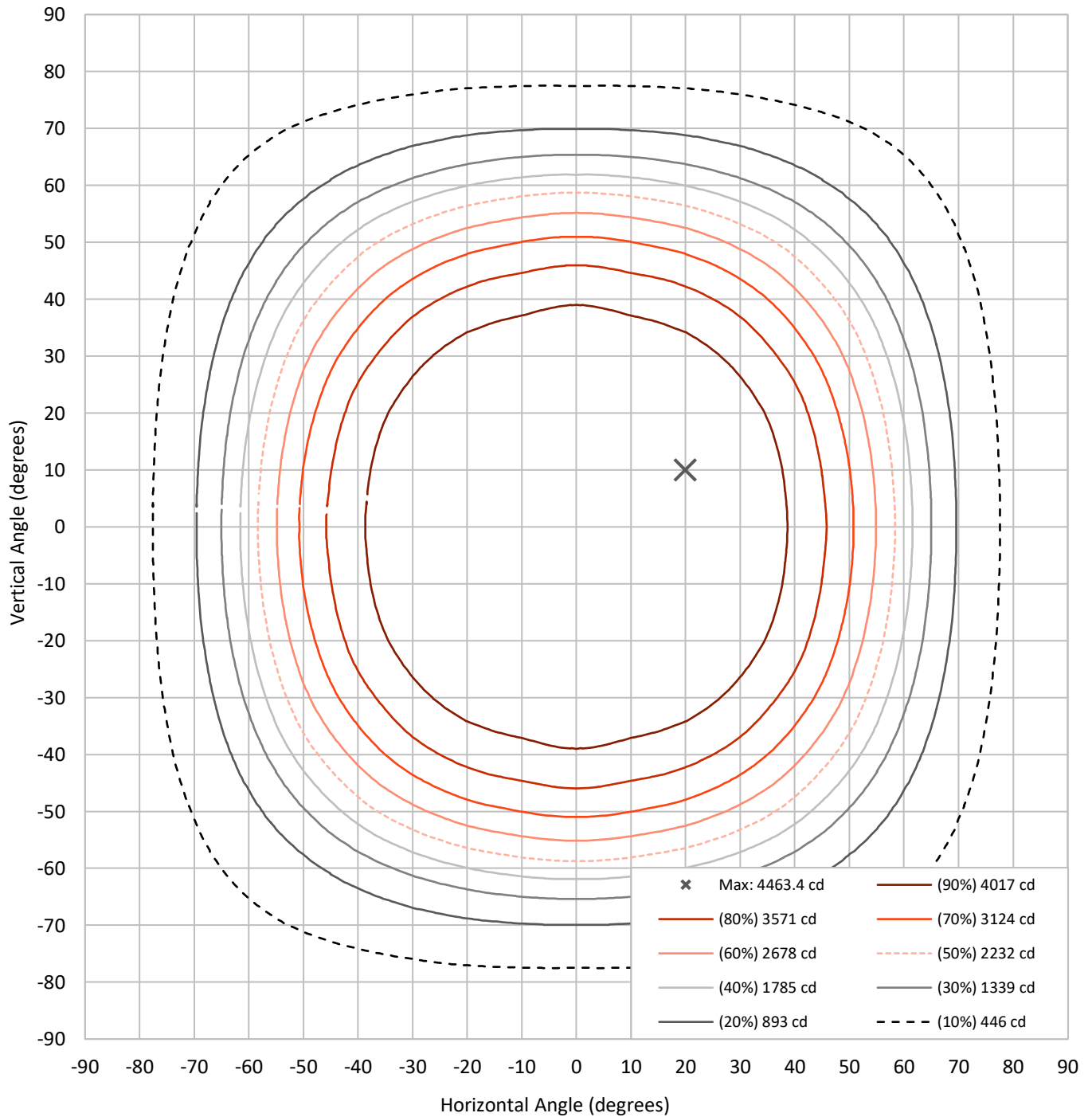
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13693 lumens	Max Intensity:	4463.4 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	87.7 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	8402.3 lumens	Field Lumens:	10072.9 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
Input Watts (W):	156.2		
Input Voltage (V):	120		
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		



REPORT NUMBER: P628357
CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

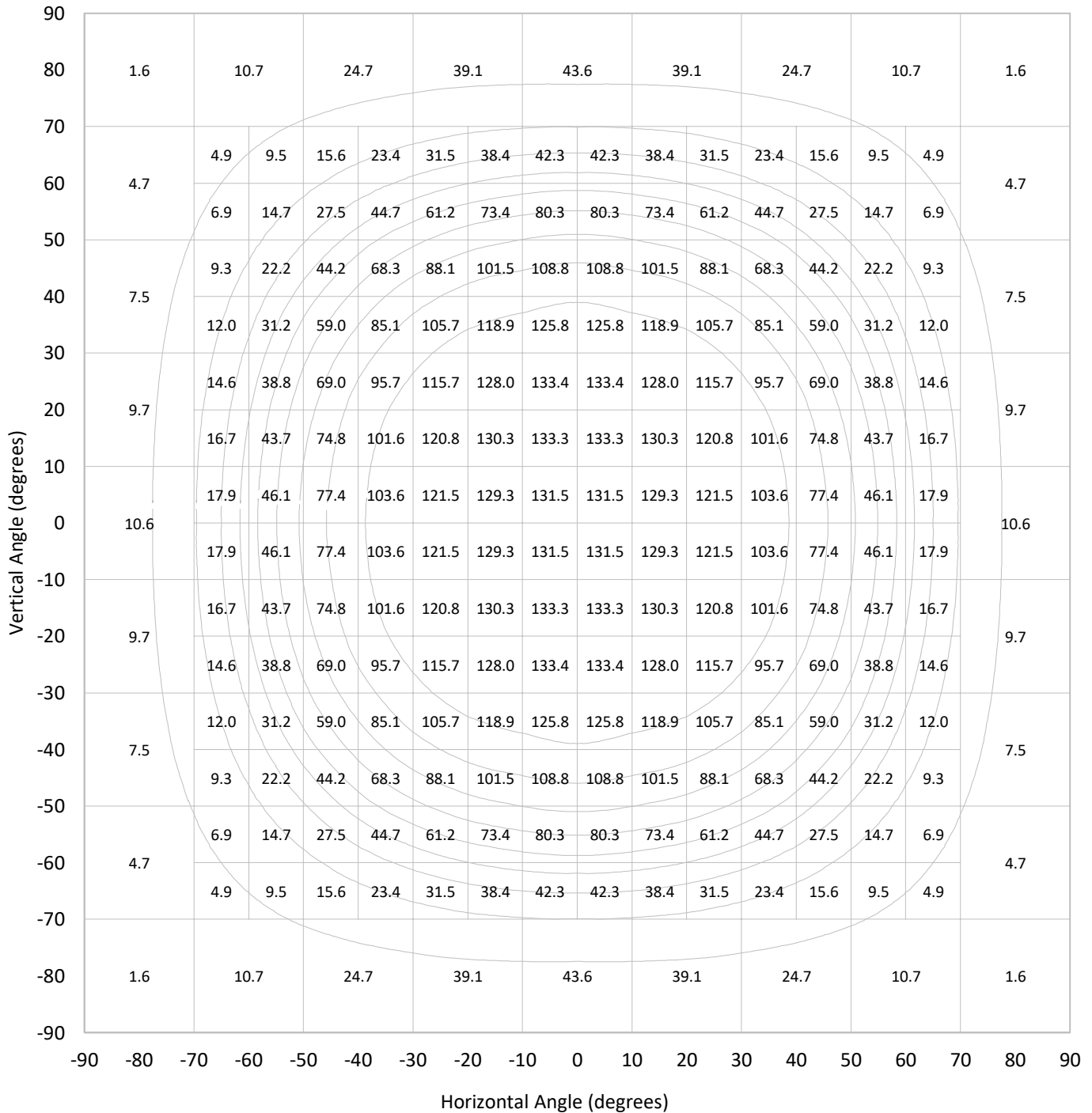
Iso-Candela Plot





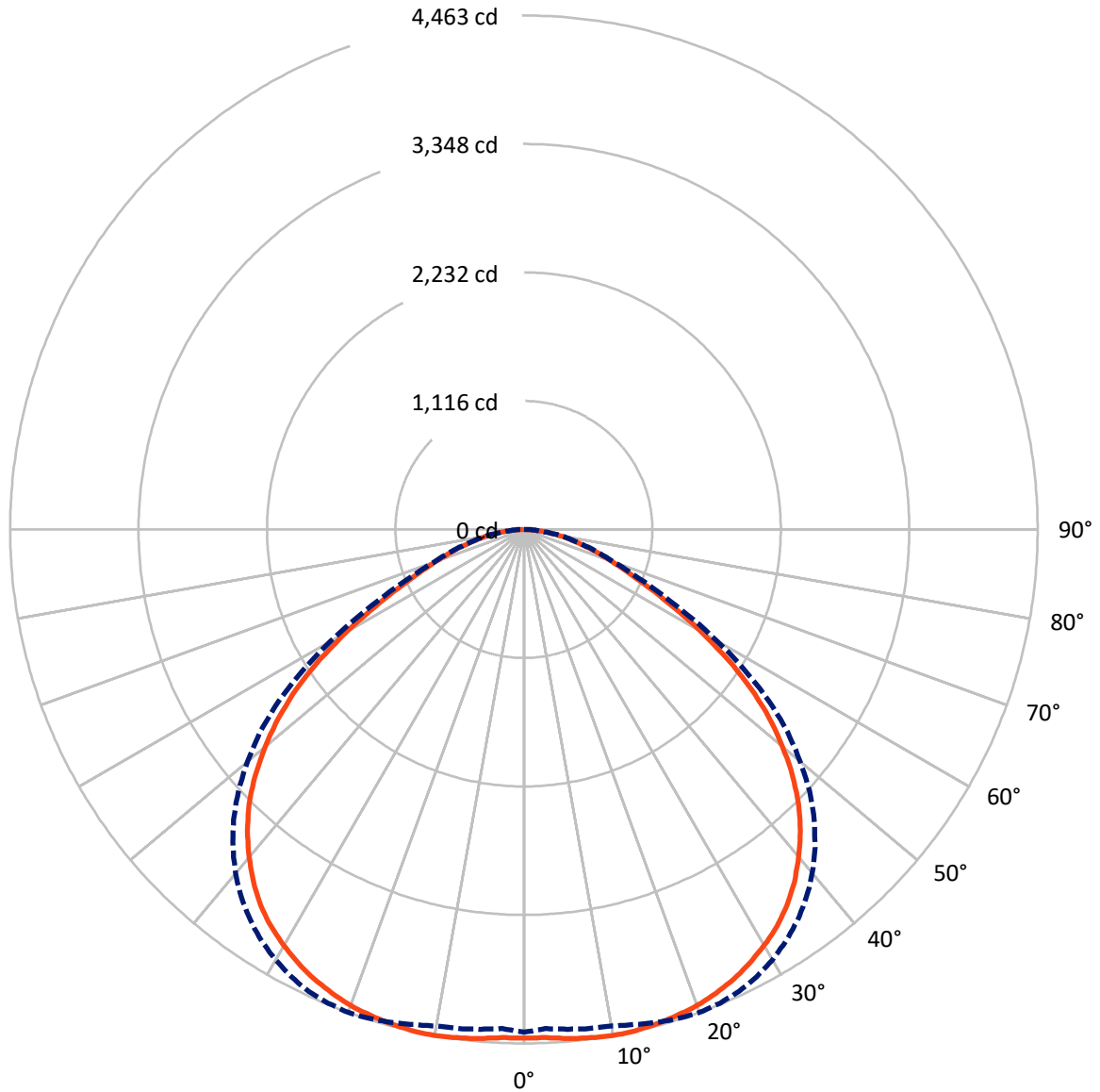
REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

Lumen Table



REPORT NUMBER: P628357
CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

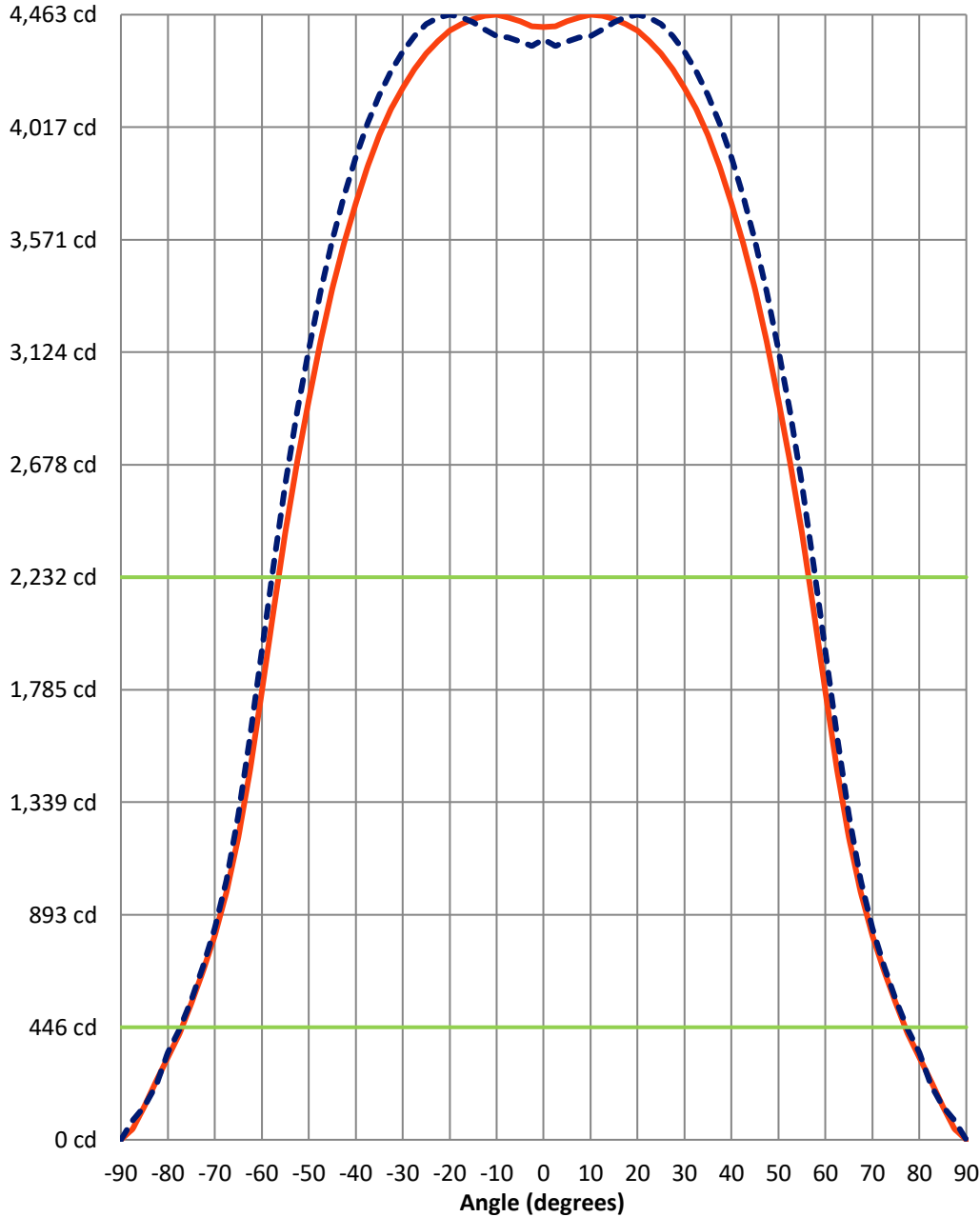
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 8402.3
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 10072.9
 Efficiency: 73.6%

Spill:
 Lumens: 3620.1
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

FIELD
 BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	36.0	38.9	40.3	41.8	43.2	44.7	46.1	44.7	43.2	43.2	41.8
85°	96.5	99.4	100.9	110.9	121.0	126.8	134.0	132.5	132.5	131.1	129.7
82.5°	193.1	201.7	208.9	219.0	224.8	233.4	239.2	234.8	232.0	226.2	221.9
80°	342.9	345.8	347.2	348.7	341.5	340.0	337.1	332.8	327.0	319.8	312.6
77.5°	436.5	439.4	442.3	439.4	438.0	436.5	432.2	427.9	422.1	416.4	407.7
75°	577.7	577.7	577.7	573.4	570.5	566.2	559.0	551.8	541.7	530.2	517.2
72.5°	727.6	726.1	724.7	716.0	708.8	700.2	690.1	681.5	669.9	657.0	639.7
70°	884.6	887.5	888.9	877.4	868.8	857.2	844.3	828.4	811.1	792.4	767.9
67.5°	1100.7	1097.8	1094.9	1079.1	1067.6	1051.7	1033.0	1009.9	984.0	955.2	920.6
65°	1368.7	1373.0	1364.4	1348.5	1326.9	1301.0	1272.2	1239.0	1200.1	1156.9	1107.9
62.5°	1692.8	1700.1	1690.0	1669.8	1642.4	1607.8	1567.5	1520.0	1466.7	1406.1	1345.6
60°	2061.7	2060.2	2041.5	2014.1	1978.1	1934.9	1890.2	1838.4	1777.8	1707.3	1633.8
57.5°	2400.2	2397.4	2374.3	2346.9	2310.9	2264.8	2217.3	2162.5	2099.1	2024.2	1939.2
55°	2704.2	2701.4	2678.3	2649.5	2612.0	2565.9	2522.7	2470.8	2408.9	2329.6	2238.9
52.5°	2973.6	2975.1	2954.9	2923.2	2882.9	2838.2	2796.4	2744.6	2685.5	2606.3	2518.4
50°	3221.5	3220.0	3198.4	3169.6	3132.1	3088.9	3047.1	2995.3	2933.3	2856.9	2771.9
47.5°	3452.0	3449.1	3424.6	3392.9	3354.0	3316.5	3277.6	3231.5	3166.7	3090.3	3005.3
45°	3645.0	3639.3	3614.8	3584.5	3547.1	3513.9	3479.3	3444.8	3375.6	3305.0	3224.3
42.5°	3810.7	3809.3	3784.8	3754.5	3717.1	3688.2	3656.5	3613.3	3555.7	3490.9	3411.6
40°	3969.2	3957.7	3933.2	3904.4	3869.8	3845.3	3813.6	3770.4	3714.2	3650.8	3574.4
37.5°	4087.3	4088.8	4062.8	4031.1	4000.9	3977.8	3949.0	3908.7	3859.7	3797.7	3721.4
35°	4199.7	4192.5	4170.9	4143.5	4116.1	4090.2	4060.0	4025.4	3985.0	3927.4	3855.4
32.5°	4273.2	4283.3	4257.3	4228.5	4212.7	4192.5	4160.8	4124.8	4088.8	4031.1	3966.3
30°	4353.9	4345.2	4325.0	4300.6	4289.0	4276.1	4248.7	4214.1	4172.3	4120.5	4060.0
27.5°	4410.0	4405.7	4381.2	4358.2	4352.4	4340.9	4319.3	4289.0	4247.2	4196.8	4140.6
25°	4434.5	4437.4	4414.4	4401.4	4401.4	4394.2	4376.9	4351.0	4309.2	4263.1	4208.3
22.5°	4446.1	4443.2	4427.3	4424.5	4431.7	4425.9	4418.7	4395.6	4358.2	4320.7	4274.6
20°	4453.3	4433.1	4418.7	4430.2	4438.9	4437.4	4431.7	4417.3	4400.0	4368.3	4327.9
17.5°	4437.4	4424.5	4407.2	4424.5	4443.2	4444.6	4438.9	4430.2	4425.9	4405.7	4369.7
15°	4398.5	4388.4	4391.3	4408.6	4430.2	4437.4	4441.7	4451.8	4446.1	4430.2	4398.5
12.5°	4372.6	4359.6	4372.6	4389.9	4401.4	4405.7	4440.3	4459.0	4459.0	4444.6	4424.5
10°	4365.4	4339.5	4356.7	4372.6	4378.4	4404.3	4433.1	4453.3	4463.4	4451.8	4425.9
7.5°	4351.0	4333.7	4340.9	4348.1	4381.2	4400.0	4415.8	4437.4	4451.8	4450.4	4427.3
5°	4343.8	4322.2	4325.0	4355.3	4378.4	4391.3	4397.1	4415.8	4437.4	4441.7	4424.5
2.5°	4325.0	4315.0	4336.6	4339.5	4356.7	4366.8	4372.6	4389.9	4417.3	4427.3	4420.1
0°	4315.0	4300.6	4286.1	4297.7	4326.5	4348.1	4356.7	4382.7	4414.4	4424.5	4408.6



REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	40.3	38.9	37.5	36.0	37.5	37.5	37.5	36.0	37.5	36.0	36.0
85°	125.3	119.6	115.3	109.5	103.7	99.4	93.6	87.9	86.4	85.0	82.1
82.5°	216.1	208.9	201.7	193.1	184.4	174.3	164.2	152.7	149.8	147.0	142.6
80°	304.0	293.9	283.8	273.7	265.1	255.0	243.5	230.5	221.9	214.7	206.0
77.5°	396.2	381.8	367.4	350.1	340.0	329.9	318.4	305.4	292.5	280.9	268.0
75°	501.4	485.5	471.1	453.8	435.1	416.4	397.6	380.4	361.6	344.3	327.0
72.5°	618.1	595.0	572.0	550.4	527.3	504.3	479.8	456.7	433.7	410.6	386.1
70°	740.5	711.7	682.9	654.1	623.8	593.6	564.8	535.9	507.1	476.9	449.5
67.5°	884.6	851.5	814.0	773.7	729.0	690.1	652.6	618.1	583.5	548.9	514.3
65°	1064.7	1018.6	968.2	913.4	861.6	809.7	754.9	703.1	662.7	622.4	583.5
62.5°	1286.6	1221.7	1151.1	1080.5	1017.1	949.4	886.0	818.3	754.9	697.3	649.8
60°	1551.7	1463.8	1377.3	1286.6	1198.7	1106.5	1025.8	942.2	863.0	792.4	723.2
57.5°	1844.1	1741.8	1638.1	1527.2	1407.6	1299.5	1190.0	1080.5	986.9	893.2	815.4
55°	2140.9	2032.9	1916.2	1790.8	1659.7	1521.4	1373.0	1250.5	1122.3	1012.8	912.0
52.5°	2423.3	2310.9	2189.9	2074.6	1917.6	1759.1	1596.3	1435.0	1285.1	1145.4	1022.9
50°	2675.4	2565.9	2449.2	2315.2	2169.7	2001.2	1819.6	1638.1	1460.9	1296.6	1143.9
47.5°	2905.9	2799.3	2682.6	2548.6	2416.1	2228.8	2045.8	1845.6	1648.2	1459.5	1280.8
45°	3122.0	3014.0	2893.0	2764.7	2612.0	2444.9	2256.2	2054.5	1842.7	1630.9	1424.9
42.5°	3318.0	3209.9	3087.5	2954.9	2803.6	2638.0	2455.0	2251.8	2038.6	1808.1	1581.9
40°	3489.4	3384.3	3266.1	3127.8	2986.6	2812.3	2632.2	2439.1	2218.7	1986.8	1737.5
37.5°	3639.3	3541.3	3424.6	3287.7	3137.9	2982.3	2796.4	2603.4	2404.6	2152.4	1897.4
35°	3771.8	3681.0	3561.5	3431.8	3284.8	3120.6	2946.3	2757.5	2542.9	2306.6	2058.8
32.5°	3887.1	3794.9	3685.4	3555.7	3413.1	3258.9	3080.3	2890.1	2686.9	2446.3	2176.9
30°	3985.0	3895.7	3792.0	3669.5	3532.6	3379.9	3205.6	3014.0	2806.5	2567.4	2300.8
27.5°	4070.0	3985.0	3884.2	3770.4	3639.3	3492.3	3316.5	3123.5	2911.7	2681.2	2414.6
25°	4143.5	4061.4	3967.7	3859.7	3730.0	3586.0	3420.3	3218.6	3006.8	2774.8	2511.2
22.5°	4209.8	4130.5	4036.9	3931.7	3813.6	3669.5	3502.4	3302.1	3087.5	2858.4	2599.1
20°	4268.9	4195.4	4103.2	3995.1	3877.0	3731.5	3565.8	3375.6	3159.5	2934.7	2678.3
17.5°	4316.4	4251.6	4159.4	4045.5	3927.4	3786.2	3624.9	3450.5	3221.5	2999.6	2744.6
15°	4349.5	4286.1	4202.6	4087.3	3972.1	3832.3	3671.0	3490.9	3277.6	3051.4	2799.3
12.5°	4372.6	4304.9	4227.1	4120.5	4005.2	3866.9	3709.9	3532.6	3325.2	3097.6	2846.9
10°	4378.4	4316.4	4238.6	4143.5	4031.1	3897.2	3743.0	3567.2	3364.1	3133.6	2885.8
7.5°	4381.2	4322.2	4251.6	4160.8	4049.9	3920.2	3767.5	3594.6	3392.9	3163.8	2914.6
5°	4379.8	4323.6	4260.2	4172.3	4061.4	3933.2	3783.3	3613.3	3413.1	3184.0	2936.2
2.5°	4375.5	4325.0	4266.0	4181.0	4074.4	3947.6	3799.2	3634.9	3434.7	3201.3	2953.5
0°	4387.0	4343.8	4268.9	4178.1	4077.2	3947.6	3797.7	3637.8	3437.6	3199.8	2952.0



REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	36.0	34.6	34.6	33.1	31.7	30.3	27.4	25.9	23.1	18.7	14.4
85°	77.8	73.5	69.2	66.3	63.4	60.5	56.2	51.9	46.1	37.5	28.8
82.5°	136.9	128.2	119.6	109.5	100.9	92.2	85.0	77.8	69.2	56.2	43.2
80°	195.9	183.0	170.0	155.6	142.6	128.2	115.3	103.7	92.2	74.9	57.6
77.5°	255.0	237.7	219.0	201.7	183.0	164.2	145.5	129.7	112.4	92.2	72.0
75°	309.8	289.6	272.3	247.8	224.8	200.3	175.8	154.2	132.5	108.1	86.4
72.5°	364.5	338.6	314.1	291.0	265.1	234.8	207.5	180.1	152.7	123.9	98.0
70°	419.2	387.6	357.3	329.9	301.1	270.9	237.7	206.0	172.9	138.3	108.1
67.5°	475.4	439.4	404.8	370.3	337.1	302.6	268.0	232.0	193.1	152.7	119.6
65°	537.4	492.7	450.9	412.0	373.1	335.7	296.8	257.9	214.7	168.6	129.7
62.5°	599.3	550.4	501.4	452.4	409.2	367.4	325.6	282.4	234.8	185.9	139.7
60°	665.6	609.4	553.2	498.5	445.2	399.1	353.0	306.9	256.4	201.7	149.8
57.5°	739.1	671.4	608.0	546.0	485.5	430.8	380.4	331.4	275.2	217.5	161.4
55°	822.7	739.1	664.2	595.0	528.7	462.5	407.7	357.3	296.8	233.4	174.3
52.5°	910.5	814.0	723.2	645.4	574.8	499.9	433.7	377.5	318.4	249.2	185.9
50°	1012.8	890.4	789.5	694.4	615.2	537.4	461.0	400.5	340.0	268.0	197.4
47.5°	1118.0	982.6	855.8	752.1	658.4	573.4	492.7	420.7	360.2	285.3	208.9
45°	1240.5	1070.5	930.7	808.2	700.2	610.9	524.4	442.3	377.5	302.6	220.4
42.5°	1358.6	1174.2	1008.5	870.2	747.7	646.9	553.2	465.4	394.8	319.8	230.5
40°	1498.3	1277.9	1083.4	929.3	795.3	681.5	582.1	489.8	410.6	335.7	240.6
37.5°	1632.3	1383.1	1174.2	994.1	841.4	716.0	610.9	512.9	425.0	351.5	253.6
35°	1764.9	1499.8	1260.6	1054.6	888.9	754.9	639.7	534.5	439.4	364.5	265.1
32.5°	1891.7	1609.3	1348.5	1122.3	940.8	791.0	665.6	554.7	453.8	376.0	276.6
30°	2009.8	1713.0	1435.0	1191.5	988.3	824.1	690.1	574.8	471.1	386.1	288.1
27.5°	2117.9	1813.9	1521.4	1256.3	1033.0	854.3	716.0	593.6	485.5	396.2	298.2
25°	2215.8	1904.6	1600.6	1315.4	1073.3	887.5	740.5	612.3	498.5	404.8	306.9
22.5°	2308.0	1988.2	1672.7	1374.4	1122.3	920.6	763.6	629.6	511.5	413.5	315.5
20°	2388.7	2064.6	1741.8	1433.5	1165.5	950.9	783.8	645.4	523.0	419.2	324.2
17.5°	2453.5	2132.3	1803.8	1485.4	1203.0	976.8	801.0	659.9	533.1	426.5	329.9
15°	2511.2	2189.9	1855.6	1530.0	1236.1	998.4	816.9	671.4	541.7	430.8	337.1
12.5°	2560.2	2238.9	1900.3	1568.9	1265.0	1017.1	829.9	680.0	548.9	435.1	341.5
10°	2600.5	2277.8	1937.8	1599.2	1288.0	1031.6	839.9	688.7	554.7	439.4	345.8
7.5°	2630.8	2306.6	1965.1	1625.1	1306.7	1041.6	848.6	694.4	560.4	442.3	353.0
5°	2653.8	2331.1	1986.8	1642.4	1321.1	1056.0	858.7	701.6	566.2	445.2	353.0
2.5°	2671.1	2351.3	2004.0	1656.8	1332.7	1053.2	858.7	700.2	566.2	445.2	351.5
0°	2668.2	2352.7	2002.6	1656.8	1332.7	1050.3	858.7	698.7	566.2	445.2	351.5



REPORT NUMBER: P628357
 CATALOG NUMBER: IFLD-S-SA2E-827-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.1	7.2	2.9	0.0
85°	21.6	14.4	7.2	0.0
82.5°	31.7	20.2	10.1	0.0
80°	41.8	27.4	13.0	0.0
77.5°	53.3	34.6	17.3	0.0
75°	63.4	40.3	20.2	0.0
72.5°	73.5	47.5	23.1	0.0
70°	82.1	53.3	25.9	0.0
67.5°	90.8	60.5	30.3	0.0
65°	98.0	66.3	33.1	0.0
62.5°	103.7	73.5	36.0	0.0
60°	110.9	79.2	38.9	0.0
57.5°	116.7	83.6	41.8	0.0
55°	122.5	86.4	44.7	0.0
52.5°	128.2	90.8	47.5	0.0
50°	134.0	95.1	50.4	0.0
47.5°	139.7	98.0	51.9	0.0
45°	148.4	102.3	54.7	0.0
42.5°	155.6	105.2	57.6	0.0
40°	162.8	108.1	59.1	0.0
37.5°	170.0	110.9	62.0	0.0
35°	177.2	113.8	63.4	0.0
32.5°	183.0	116.7	64.8	0.0
30°	188.7	119.6	66.3	0.0
27.5°	194.5	121.0	67.7	0.0
25°	198.8	123.9	69.2	0.0
22.5°	203.1	125.3	70.6	0.0
20°	206.0	126.8	72.0	0.0
17.5°	210.3	128.2	73.5	0.0
15°	211.8	129.7	76.4	0.0
12.5°	214.7	131.1	76.4	0.0
10°	216.1	132.5	76.4	0.0
7.5°	219.0	132.5	76.4	0.0
5°	217.5	132.5	76.4	0.0
2.5°	217.5	132.5	76.4	0.0
0°	216.1	132.5	76.4	0.0

(END OF REPORT)