

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: LUMARK

Report Number: P189783

Luminaire Tested: **NFFLD-S-C70-D-UNV-33-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1017-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-S-C70-D-UNV-33-7050
Description: LOW WATTAGE LED FLOODLIGHT
Light Source: (2) CITIZEN 5000 70
CLU028-1204C4-50AL7K3
Ballast/Driver: OSRAM ELECTRONIC DRIVER
OT50W/UNV/800C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2964.1 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: (L: 0 ' x W: 0.46 ' x H: 0.33 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

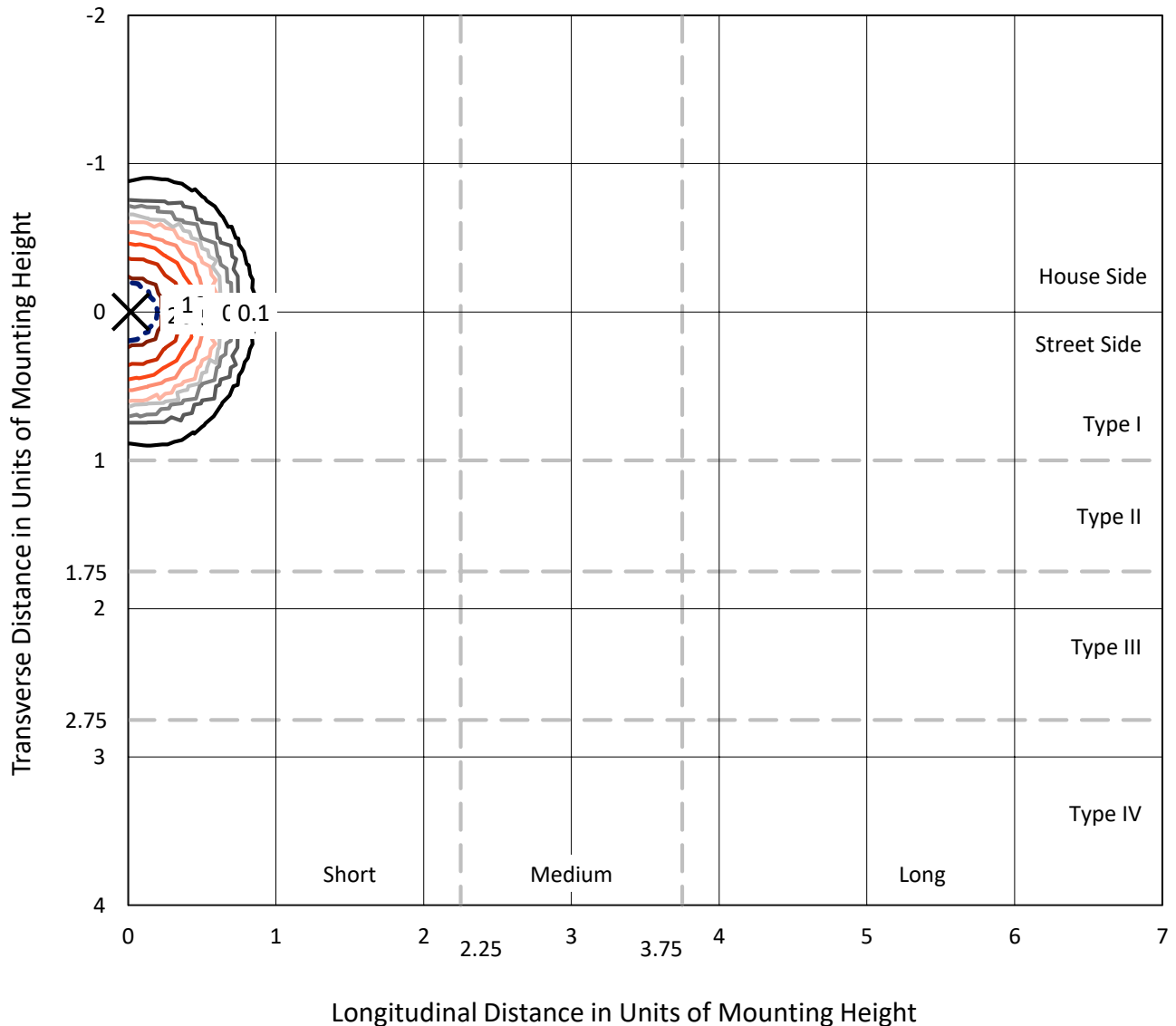
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P189783
 CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

Iso-Footcandle Lines of Horizontal Illumination

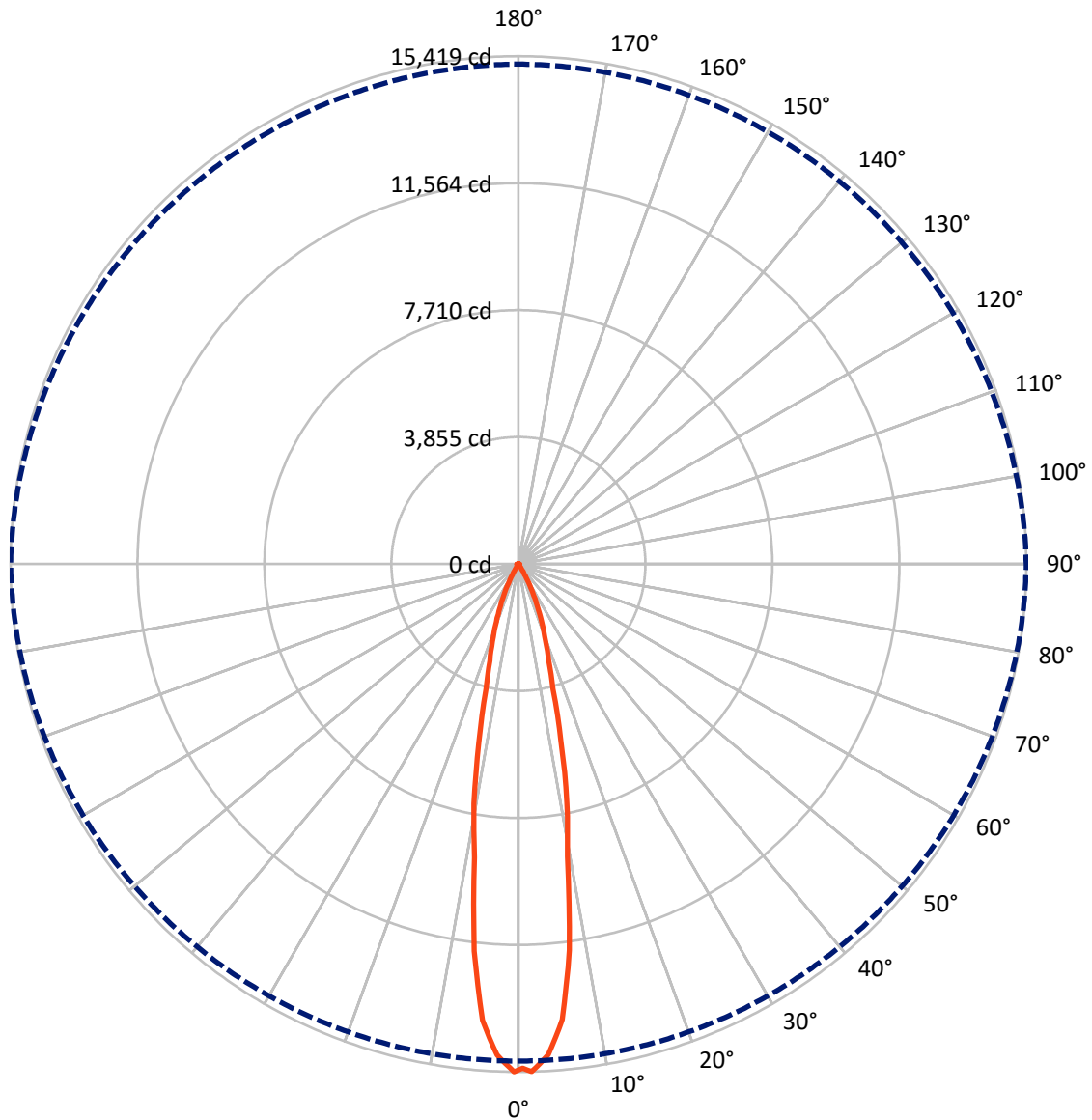
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 153 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P189783
CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 1-Deg Vertical

REPORT NUMBER: P189783

CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

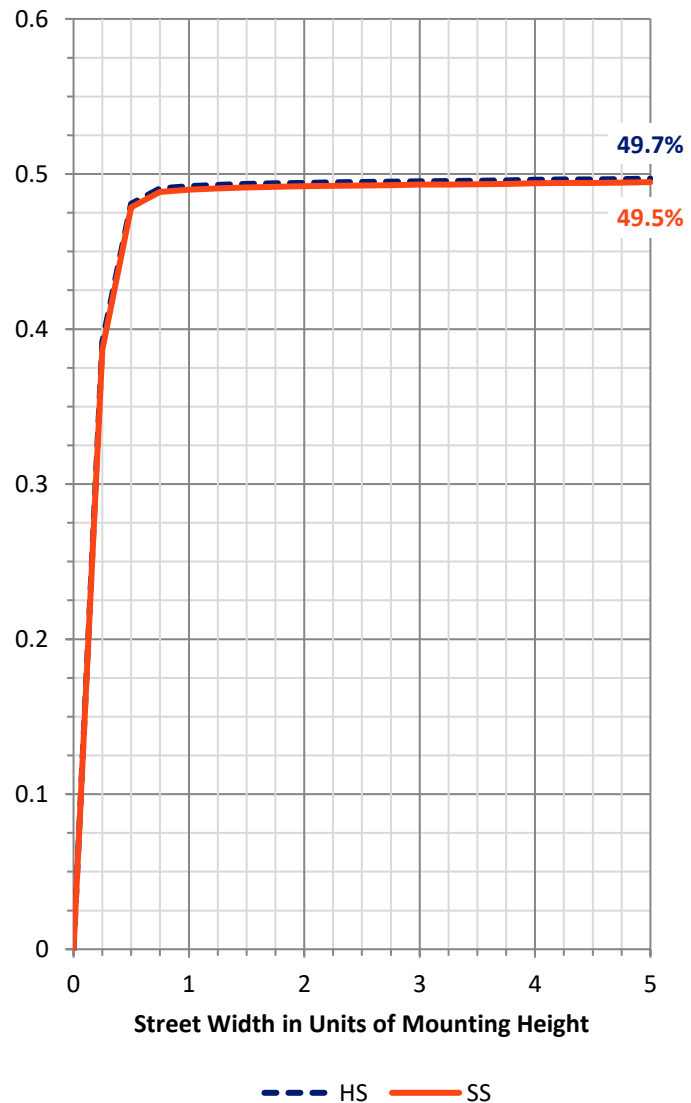
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1498.8	0.0	1498.8
	% Fixture	50.6	0.0	50.6
Street Side	Lumens	1465.3	0.0	1465.3
	% Fixture	49.4	0.0	49.4
Total	Lumens	2964.1	0.0	2964.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1114.1	37.6
10°-20°	1186.8	40.0
20°-30°	543.7	18.3
30°-40°	104.2	3.5
40°-50°	14.0	0.5
50°-60°	6.9	0.2
60°-70°	5.6	0.2
70°-80°	13.7	0.5
80°-90°	10.6	0.4
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°	2964.1	100.0
0°-180°	2964.1	100.0



REPORT NUMBER: P189783

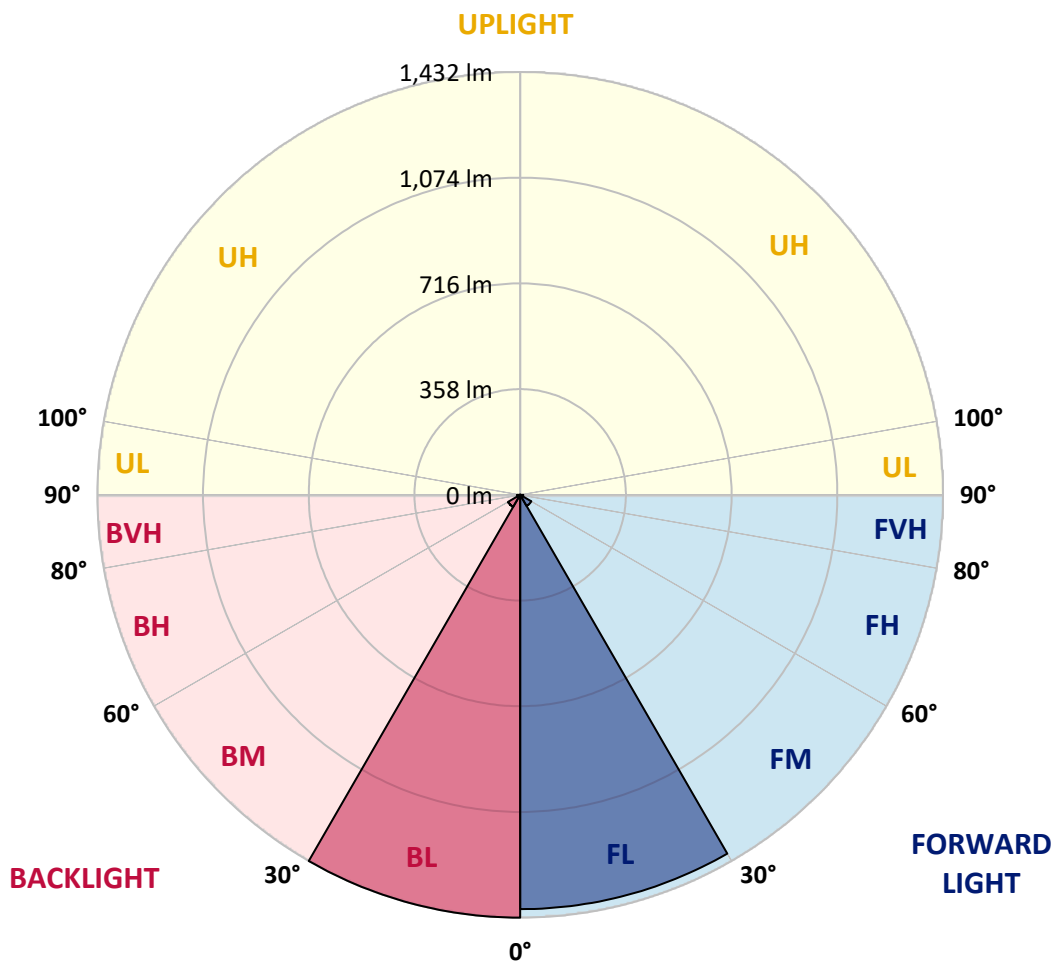
CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1402.7	47.3			
FM	(30°-60°)	43.5	1.5			
FH	(60°-80°)	8.1	0.3			G0/660
FVH	(80°-90°)	10.8	0.4			G1/100
BL	(0°-30°)	1431.6	48.3	B3/2500		
BM	(30°-60°)	47.8	1.6	B0/220		
BH	(60°-80°)	8.3	0.3	B0/110		G0/660
BVH	(80°-90°)	10.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P189783

CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3
1°	15090.2	15098.8	15114.9	15139.2	15171.9	15212.4	15259.6	15311.4	15365.5	15419.0	15354.6
3°	14736.9	14764.4	14799.6	14731.7	14702.9	14716.7	14772.7	14866.7	14891.3	14918.6	14903.5
5°	13535.1	13685.0	13593.3	13564.8	13602.4	13626.6	13628.4	13678.8	13817.4	13895.4	13885.4
7°	11459.2	11632.5	11438.7	11441.7	11591.5	11621.6	11546.0	11580.5	11717.9	11824.7	11795.2
9°	8739.8	8913.6	8979.9	9033.2	9018.2	9020.7	9081.3	9090.6	8976.1	9003.7	9001.8
11°	7095.4	7171.5	7103.4	7154.5	7198.1	7212.8	7219.6	7251.0	7322.8	7395.9	7361.9
13°	5548.4	5421.5	5408.5	5445.5	5455.9	5507.7	5541.6	5528.7	5512.3	5552.5	5536.7
15°	3966.9	3916.4	3989.2	3947.6	4011.8	4067.6	3983.3	4035.7	3974.7	3936.5	3981.0
17°	3065.5	3024.1	3041.0	3031.6	3058.5	3040.4	3053.8	3062.3	3066.8	3055.4	3071.4
19.5°	2286.0	2248.8	2275.1	2252.7	2264.5	2262.3	2276.1	2298.1	2295.0	2334.7	2300.7
22.5°	1601.8	1590.0	1604.3	1616.8	1601.8	1624.0	1624.0	1629.2	1641.4	1643.4	1653.9
25.5°	1031.3	1014.0	1025.8	1033.8	1042.2	1058.0	1059.2	1069.5	1067.8	1069.9	1081.1
29°	456.8	452.2	474.5	453.2	476.3	472.3	490.3	509.4	483.9	471.0	491.4
33°	84.3	95.9	129.0	95.3	117.0	113.7	124.2	139.3	110.8	83.2	113.5
37.5°	27.4	32.0	35.2	32.4	31.4	30.3	30.4	29.9	28.7	24.4	29.1
42.5°	23.3	24.8	26.6	26.1	23.7	21.2	19.0	18.4	18.2	18.3	18.2
47.5°	12.2	15.3	19.1	17.1	15.2	12.4	10.0	9.9	9.0	9.1	9.0
55°	3.0	8.1	10.4	8.6	6.4	3.8	2.2	1.0	1.3	0.0	1.8
65°	2.0	9.1	8.2	6.0	4.4	3.0	1.9	2.4	2.6	2.0	2.9
75°	1.0	8.1	5.5	4.3	6.7	7.9	10.2	11.3	14.4	12.2	14.4
85°	0.0	4.6	15.7	29.5	36.6	38.6	39.2	42.1	42.2	45.7	42.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P189783

CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3
1°	15292.3	15237.3	15193.6	15163.8	15148.9	15148.0	15158.7	15177.5	15158.7	15148.0	15148.9
3°	14886.3	14825.2	14793.8	14795.7	14830.9	14895.6	14963.0	15040.4	14963.0	14895.6	14830.9
5°	13786.7	13779.3	13828.9	13869.5	13855.4	13864.9	13976.2	14149.2	13976.2	13864.9	13855.4
7°	11720.0	11718.0	11804.8	11833.4	11843.0	11927.6	12083.0	12253.0	12083.0	11927.6	11843.0
9°	9159.0	9205.5	9159.6	9146.1	9235.4	9298.7	9166.0	9273.8	9166.0	9298.7	9235.4
11°	7306.4	7282.6	7296.3	7285.0	7231.5	7269.2	7329.5	7432.4	7329.5	7269.2	7231.5
13°	5571.2	5568.9	5540.1	5508.6	5486.9	5463.2	5470.5	5606.3	5470.5	5463.2	5486.9
15°	4053.5	4006.5	4067.3	4047.7	3989.4	4036.3	4001.4	3900.9	4001.4	4036.3	3989.4
17°	3074.3	3093.5	3092.7	3100.7	3102.9	3114.2	3127.4	3150.8	3127.4	3114.2	3102.9
19.5°	2314.2	2323.0	2327.6	2334.7	2331.1	2350.4	2348.3	2382.4	2348.3	2350.4	2331.1
22.5°	1652.2	1659.7	1677.4	1680.3	1691.0	1696.6	1699.9	1693.2	1699.9	1696.6	1691.0
25.5°	1093.0	1092.6	1101.4	1117.0	1122.3	1125.4	1120.5	1119.6	1120.5	1125.4	1122.3
29°	525.6	515.1	511.9	530.3	525.8	540.9	527.6	519.7	527.6	540.9	525.8
33°	147.2	138.7	133.2	139.7	123.4	152.5	123.4	109.6	123.4	152.5	123.4
37.5°	30.5	33.1	33.8	34.0	34.8	39.3	34.9	28.4	34.9	39.3	34.8
42.5°	18.8	20.0	22.2	24.3	26.1	26.5	24.8	22.3	24.8	26.5	26.1
47.5°	10.9	11.0	13.6	15.7	17.8	18.5	16.0	12.2	16.0	18.5	17.8
55°	1.6	2.7	4.5	6.4	8.9	10.3	8.1	3.0	8.1	10.3	8.9
65°	3.1	2.5	3.0	4.4	6.2	8.2	9.1	2.0	9.1	8.2	6.2
75°	11.3	10.6	8.9	6.8	4.3	5.5	8.1	1.0	8.1	5.5	4.3
85°	42.6	40.0	39.0	37.5	29.5	15.7	4.6	0.0	4.6	15.7	29.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P189783

CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3	15303.3
1°	15163.8	15193.6	15237.3	15292.3	15354.6	15419.0	15365.5	15311.4	15259.6	15212.4	15171.9
3°	14795.7	14793.8	14825.2	14886.3	14903.5	14918.6	14891.3	14866.7	14772.7	14716.7	14702.9
5°	13869.5	13828.9	13779.3	13786.7	13885.4	13895.4	13817.4	13678.8	13628.4	13626.6	13602.4
7°	11833.4	11804.8	11718.0	11720.0	11795.2	11824.7	11717.9	11580.5	11546.0	11621.6	11591.5
9°	9146.1	9159.6	9205.5	9159.0	9001.8	9003.7	8976.1	9090.6	9081.3	9020.7	9018.2
11°	7285.0	7296.3	7282.6	7306.4	7361.9	7395.9	7322.8	7251.0	7219.6	7212.8	7198.1
13°	5508.6	5540.1	5568.9	5571.2	5536.7	5552.5	5512.3	5528.7	5541.6	5507.7	5455.9
15°	4047.7	4067.3	4006.5	4053.5	3981.0	3936.5	3974.7	4035.7	3983.3	4067.6	4011.8
17°	3100.7	3092.7	3093.5	3074.3	3071.4	3055.4	3066.8	3062.3	3053.8	3040.4	3058.5
19.5°	2334.7	2327.6	2323.0	2314.2	2300.7	2334.7	2295.0	2298.1	2276.1	2262.3	2264.5
22.5°	1680.3	1677.4	1659.7	1652.2	1653.9	1643.4	1641.4	1629.2	1624.0	1624.0	1601.8
25.5°	1117.0	1101.4	1092.6	1093.0	1081.1	1069.9	1067.8	1069.5	1059.2	1058.0	1042.2
29°	530.3	511.9	515.1	525.6	491.4	471.0	483.9	509.4	490.3	472.3	476.3
33°	139.7	133.2	138.7	147.2	113.5	83.2	110.8	139.3	124.2	113.7	117.0
37.5°	34.0	33.8	33.1	30.5	29.1	24.4	28.7	29.9	30.4	30.3	31.4
42.5°	24.3	22.2	20.0	18.8	18.2	18.3	18.2	18.4	19.0	21.2	23.7
47.5°	15.7	13.6	11.0	10.9	9.0	9.1	9.0	9.9	10.0	12.4	15.2
55°	6.4	4.5	2.7	1.6	1.8	0.0	1.3	1.0	2.2	3.8	6.4
65°	4.4	3.0	2.5	3.1	2.9	2.0	2.6	2.4	1.9	3.0	4.4
75°	6.8	8.9	10.6	11.3	14.4	12.2	14.4	11.3	10.2	7.9	6.7
85°	37.5	39.0	40.0	42.6	42.2	45.7	42.2	42.1	39.2	38.6	36.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P189783

CATALOG NUMBER: NFFLD-S-C70-D-UNV-33-7050

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	15303.3	15303.3	15303.3	15303.3
1°	15139.2	15114.9	15098.8	15090.2
3°	14731.7	14799.6	14764.4	14736.9
5°	13564.8	13593.3	13685.0	13535.1
7°	11441.7	11438.7	11632.5	11459.2
9°	9033.2	8979.9	8913.6	8739.8
11°	7154.5	7103.4	7171.5	7095.4
13°	5445.5	5408.5	5421.5	5548.4
15°	3947.6	3989.2	3916.4	3966.9
17°	3031.6	3041.0	3024.1	3065.5
19.5°	2252.7	2275.1	2248.8	2286.0
22.5°	1616.8	1604.3	1590.0	1601.8
25.5°	1033.8	1025.8	1014.0	1031.3
29°	453.2	474.5	452.2	456.8
33°	95.3	129.0	95.9	84.3
37.5°	32.4	35.2	32.0	27.4
42.5°	26.1	26.6	24.8	23.3
47.5°	17.1	19.1	15.3	12.2
55°	8.6	10.4	8.1	3.0
65°	6.0	8.2	9.1	2.0
75°	4.3	5.5	8.1	1.0
85°	29.5	15.7	4.6	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)