

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: P232908

Luminaire Tested: **NFFLD-L-C150-D-UNV-66-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232908  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-236-2)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NFFLD-L-C150-D-UNV-66-7060  
Description: LED FLOOD LIGHT LUMINAIRE  
Light Source: (4) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42271 lumens  
Efficiency: N/A  
Efficacy: 133.8 lumens/watt  
Luminous Opening: (L: 0 ' x W: 1 ' x H: 0 '  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 316  
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

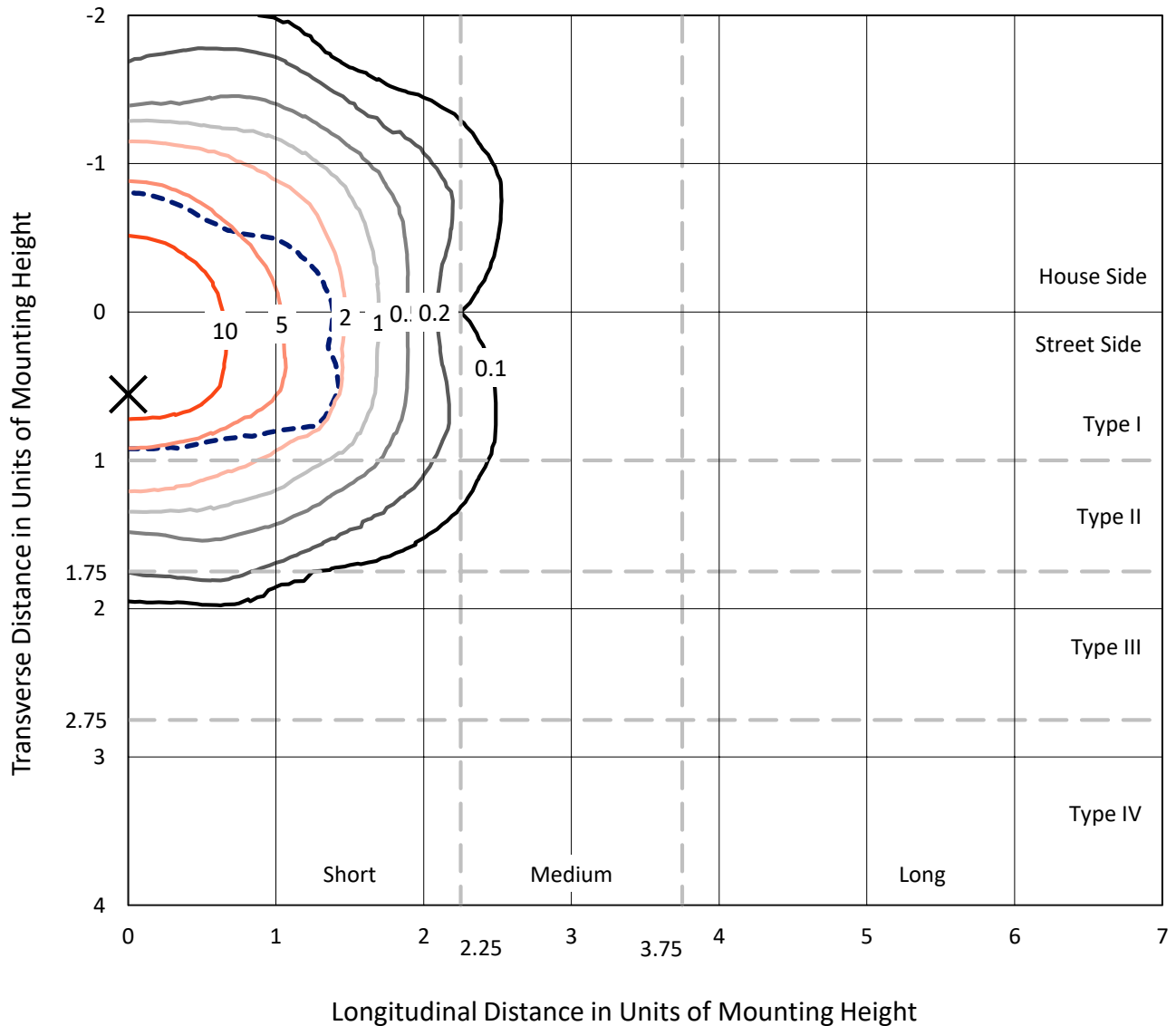


REPORT NUMBER: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

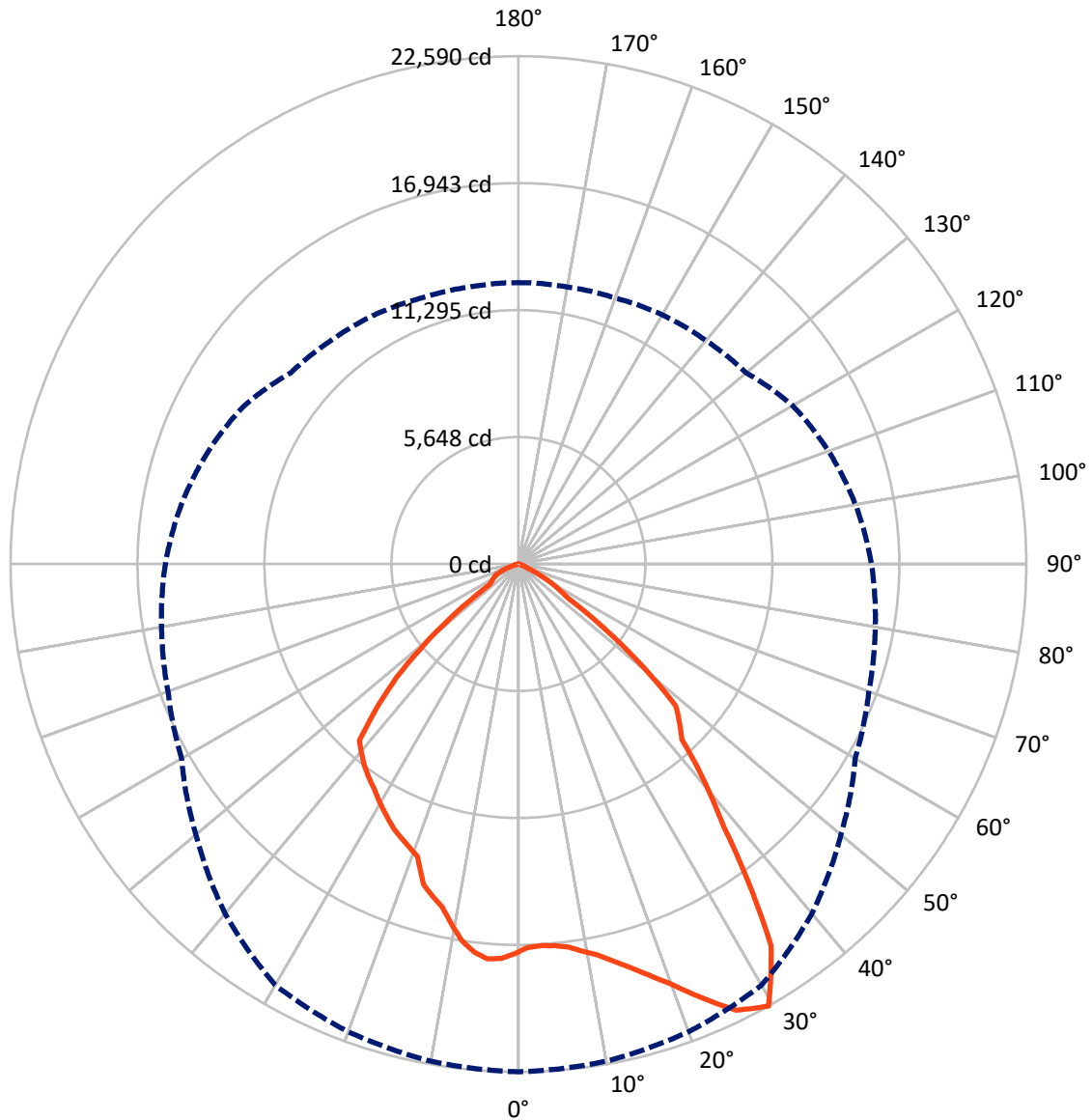


Based on 30 foot mounting height. Maximum calculated value = 19.1 fc  
 Type I - Short - Full Cutoff

REPORT NUMBER: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 29-Deg Vertical

REPORT NUMBER: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

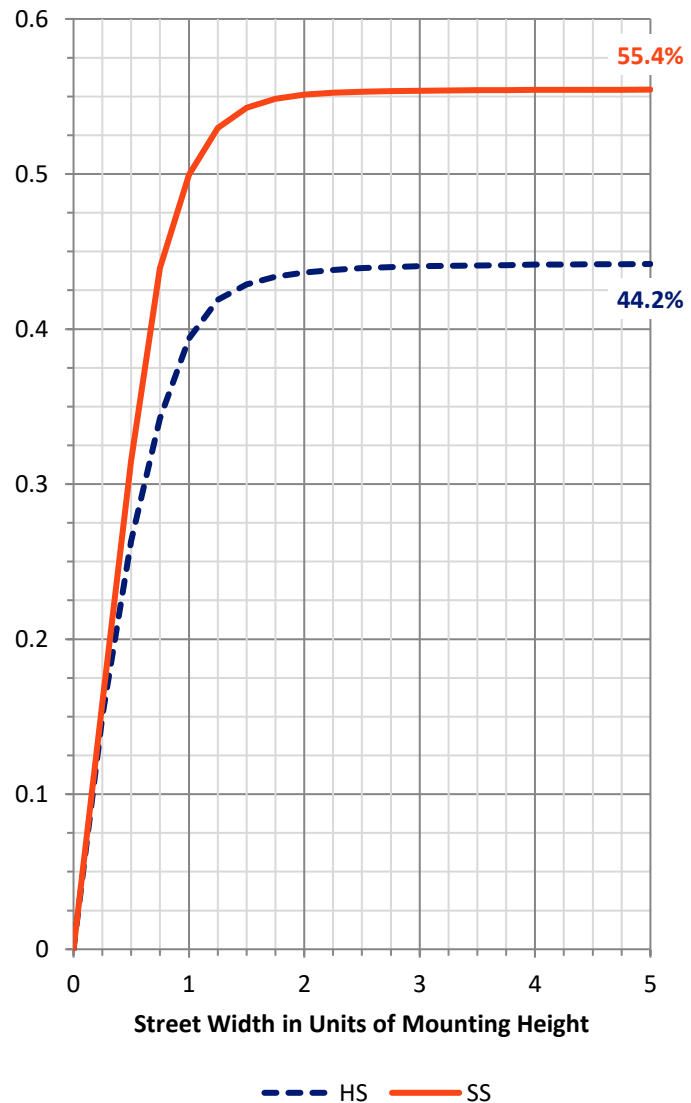
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18845.0	0.0	18845.0
	% Fixture	44.6	0.0	44.6
<b>Street Side</b>	Lumens	23425.9	0.0	23425.9
	% Fixture	55.4	0.0	55.4
<b>Total</b>	Lumens	42271.0	0.0	42271.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1644.9	3.9
10°-20°	4790.0	11.3
20°-30°	7691.2	18.2
30°-40°	9478.3	22.4
40°-50°	9285.9	22.0
50°-60°	6507.9	15.4
60°-70°	2783.3	6.6
70°-80°	621.9	1.5
80°-90°	76.9	0.2
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°	42271.0	100.0
0°-180°	42271.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P232908

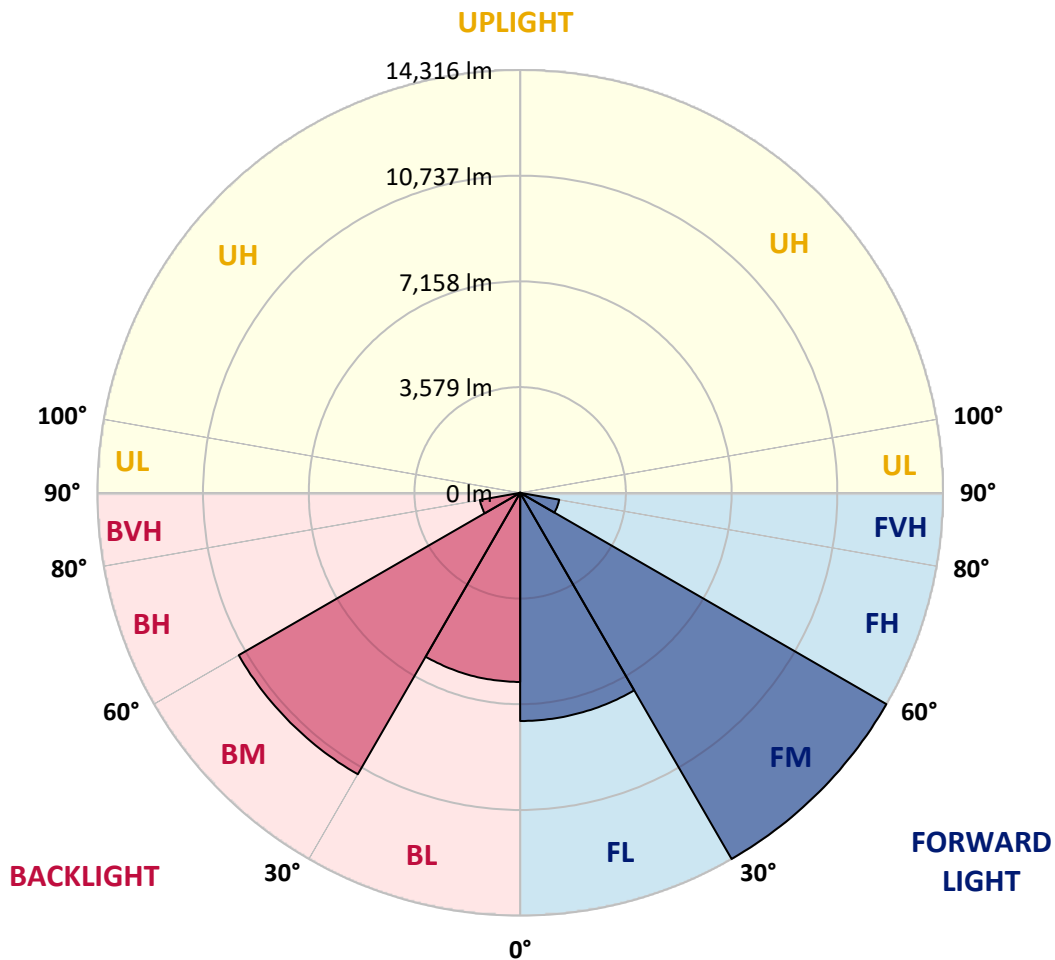
CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7724.1	18.3			
FM	(30°-60°)	14315.8	33.9			
FH	(60°-80°)	1339.1	3.2			G1/1800
FVH	(80°-90°)	28.5	0.1			G1/100
BL	(0°-30°)	6403.4	15.1	B5		
BM	(30°-60°)	11001.4	26.0	B5		
BH	(60°-80°)	1384.0	3.3	B3/2500		G3/2500
BVH	(80°-90°)	40.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type I Short





REPORT NUMBER: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7
1°	17057.4	17054.6	17055.7	17060.8	17069.9	17082.6	17098.8	17117.7	17138.8	17161.1	17186.6
3°	17006.0	16996.0	16989.0	16998.4	17010.8	17026.1	17043.7	17062.9	17129.3	17199.0	17265.6
5°	17053.5	17030.7	17027.3	17024.5	17017.8	17009.4	17029.5	17066.2	17116.6	17232.0	17333.2
7°	17191.2	17185.3	17156.5	17117.0	17067.1	17032.3	17022.2	17051.3	17112.1	17232.0	17362.4
9°	17466.7	17421.3	17360.9	17273.1	17156.4	17068.9	17011.3	17023.1	17106.4	17247.4	17358.8
11°	17757.6	17716.0	17627.9	17481.7	17300.6	17123.3	17017.2	17016.6	17110.8	17262.0	17340.2
13°	18169.9	18097.7	17956.3	17731.1	17476.4	17227.9	17040.0	17013.5	17133.2	17262.0	17254.7
15°	18622.9	18558.4	18358.2	18053.0	17688.9	17345.6	17092.3	17008.6	17131.8	17210.6	17125.7
17°	19153.5	19063.1	18808.5	18421.1	17931.9	17472.2	17141.2	17016.4	17140.1	17165.0	16998.8
19.5°	19885.8	19769.6	19437.4	18925.1	18289.3	17666.6	17207.6	16977.4	17066.2	17021.4	16698.7
22.5°	20971.3	20786.4	20339.2	19640.0	18862.1	17997.7	17238.3	16901.2	17005.5	17157.2	16429.0
25.5°	22083.9	21883.1	21360.5	20533.8	19543.1	18402.5	17328.3	16760.7	16569.7	16358.9	15859.6
29°	22590.2	22456.0	22136.8	21627.5	20300.3	18725.7	17297.4	16583.4	16118.2	15704.2	15225.3
33°	20374.7	20482.7	21002.5	21863.5	20909.4	19037.4	17321.1	16478.6	15621.8	14942.7	14451.8
37.5°	14838.0	15194.5	16636.2	18804.9	19947.9	19291.5	17491.4	16445.8	15100.9	14282.2	13695.7
42.5°	10660.2	10969.4	11879.6	13246.8	15706.5	17960.4	17740.5	16430.6	14531.2	13876.7	13195.5
47.5°	9417.6	9340.2	9501.9	9651.6	10949.1	14186.7	17234.3	16103.0	13679.6	13178.4	12807.8
55°	2679.1	3241.6	4383.7	5443.6	7036.8	8158.3	12471.4	12553.8	10625.7	10969.7	10480.2
65°	448.1	470.8	961.4	947.3	1414.0	2393.6	3156.9	3340.0	2486.4	1455.9	2553.7
75°	59.1	76.2	112.1	99.9	106.6	85.6	224.5	192.9	281.2	346.3	401.0
85°	0.0	44.2	45.6	49.1	48.7	49.4	59.4	68.5	70.2	84.4	88.2
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: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7
1°	17211.9	17236.3	17259.2	17279.8	17297.7	17312.2	17322.8	17329.0	17322.8	17312.2	17297.7
3°	17329.3	17383.8	17433.3	17476.7	17512.6	17539.6	17556.2	17560.8	17556.2	17539.6	17512.6
5°	17419.6	17502.0	17556.5	17558.6	17563.6	17572.7	17587.8	17619.9	17587.8	17572.7	17563.6
7°	17458.3	17508.6	17516.3	17484.2	17413.3	17373.7	17363.2	17371.6	17363.2	17373.7	17413.3
9°	17446.8	17414.5	17314.1	17218.4	17088.2	16998.2	16954.4	16950.7	16954.4	16998.2	17088.2
11°	17330.3	17219.4	17027.2	16789.1	16600.1	16426.6	16326.0	16297.9	16326.0	16426.6	16600.1
13°	17144.0	16894.9	16592.3	16303.9	16027.7	15829.1	15678.4	15629.6	15678.4	15829.1	16027.7
15°	16895.8	16504.3	16150.4	15841.9	15546.7	15397.3	15287.6	15262.9	15287.6	15397.3	15546.7
17°	16615.8	16169.4	15793.7	15463.8	15245.5	15023.5	14896.2	14858.3	14896.2	15023.5	15245.5
19.5°	16240.4	15827.8	15425.4	15120.3	14791.1	14201.1	13872.1	13764.2	13872.1	14201.1	14791.1
22.5°	15845.7	15417.6	15008.1	14481.3	13720.8	13502.8	13407.3	13383.0	13407.3	13502.8	13720.8
25.5°	15393.7	14900.0	14413.6	13594.6	13300.3	13132.4	13046.9	13040.6	13046.9	13132.4	13300.3
29°	14678.4	14084.8	13229.2	12973.7	12798.5	12591.3	12512.4	12516.8	12512.4	12591.3	12798.5
33°	13827.9	13081.7	12377.1	12255.0	12036.3	11928.3	11890.3	11910.6	11890.3	11928.3	12036.3
37.5°	12981.5	12156.1	11648.0	11372.5	11265.4	11293.0	11311.7	11337.2	11311.7	11293.0	11265.4
42.5°	12250.6	11470.2	10815.7	10520.0	10528.6	10495.1	10495.1	10577.8	10495.1	10495.1	10528.6
47.5°	11744.3	10946.6	9935.5	9639.3	9301.1	8283.2	7623.4	7419.4	7623.4	8283.2	9301.1
55°	9940.8	9789.6	8205.3	6422.4	4531.7	2996.9	2057.5	1550.1	2057.5	2996.9	4531.7
65°	3508.6	2969.6	1756.3	1301.1	1418.0	1219.0	1093.8	1077.6	1093.8	1219.0	1418.0
75°	398.6	325.9	312.1	244.3	309.3	248.9	173.5	153.3	173.5	248.9	309.3
85°	73.7	75.7	67.1	57.4	55.5	45.2	41.1	7.7	41.1	45.2	55.5
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: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

**CANDELA DISTRIBUTION (continued):**

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7	17174.7
1°	17279.8	17259.2	17236.3	17211.9	17186.6	17161.1	17138.8	17117.7	17098.8	17082.6	17069.9
3°	17476.7	17433.3	17383.8	17329.3	17265.6	17199.0	17129.3	17062.9	17043.7	17026.1	17010.8
5°	17558.6	17556.5	17502.0	17419.6	17333.2	17232.0	17116.6	17066.2	17029.5	17009.4	17017.8
7°	17484.2	17516.3	17508.6	17458.3	17362.4	17232.0	17112.1	17051.3	17022.2	17032.3	17067.1
9°	17218.4	17314.1	17414.5	17446.8	17358.8	17247.4	17106.4	17023.1	17011.3	17068.9	17156.4
11°	16789.1	17027.2	17219.4	17330.3	17340.2	17262.0	17110.8	17016.6	17017.2	17123.3	17300.6
13°	16303.9	16592.3	16894.9	17144.0	17254.7	17262.0	17133.2	17013.5	17040.0	17227.9	17476.4
15°	15841.9	16150.4	16504.3	16895.8	17125.7	17210.6	17131.8	17008.6	17092.3	17345.6	17688.9
17°	15463.8	15793.7	16169.4	16615.8	16998.8	17165.0	17140.1	17016.4	17141.2	17472.2	17931.9
19.5°	15120.3	15425.4	15827.8	16240.4	16698.7	17021.4	17066.2	16977.4	17207.6	17666.6	18289.3
22.5°	14481.3	15008.1	15417.6	15845.7	16429.0	17157.2	17005.5	16901.2	17238.3	17997.7	18862.1
25.5°	13594.6	14413.6	14900.0	15393.7	15859.6	16358.9	16569.7	16760.7	17328.3	18402.5	19543.1
29°	12973.7	13229.2	14084.8	14678.4	15225.3	15704.2	16118.2	16583.4	17297.4	18725.7	20300.3
33°	12255.0	12377.1	13081.7	13827.9	14451.8	14942.7	15621.8	16478.6	17321.1	19037.4	20909.4
37.5°	11372.5	11648.0	12156.1	12981.5	13695.7	14282.2	15100.9	16445.8	17491.4	19291.5	19947.9
42.5°	10520.0	10815.7	11470.2	12250.6	13195.5	13876.7	14531.2	16430.6	17740.5	17960.4	15706.5
47.5°	9639.3	9935.5	10946.6	11744.3	12807.8	13178.4	13679.6	16103.0	17234.3	14186.7	10949.1
55°	6422.4	8205.3	9789.6	9940.8	10480.2	10969.7	10625.7	12553.8	12471.4	8158.3	7036.8
65°	1301.1	1756.3	2969.6	3508.6	2553.7	1455.9	2486.4	3340.0	3156.9	2393.6	1414.0
75°	244.3	312.1	325.9	398.6	401.0	346.3	281.2	192.9	224.5	85.6	106.6
85°	57.4	67.1	75.7	73.7	88.2	84.4	70.2	68.5	59.4	49.4	48.7
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: P232908

CATALOG NUMBER: NFFLD-L-C150-D-UNV-66-7060

**CANDELA DISTRIBUTION (continued):**

	330°	340°	350°	360°
0°	17174.7	17174.7	17174.7	17174.7
1°	17060.8	17055.7	17054.6	17057.4
3°	16998.4	16989.0	16996.0	17006.0
5°	17024.5	17027.3	17030.7	17053.5
7°	17117.0	17156.5	17185.3	17191.2
9°	17273.1	17360.9	17421.3	17466.7
11°	17481.7	17627.9	17716.0	17757.6
13°	17731.1	17956.3	18097.7	18169.9
15°	18053.0	18358.2	18558.4	18622.9
17°	18421.1	18808.5	19063.1	19153.5
19.5°	18925.1	19437.4	19769.6	19885.8
22.5°	19640.0	20339.2	20786.4	20971.3
25.5°	20533.8	21360.5	21883.1	22083.9
29°	21627.5	22136.8	22456.0	22590.2
33°	21863.5	21002.5	20482.7	20374.7
37.5°	18804.9	16636.2	15194.5	14838.0
42.5°	13246.8	11879.6	10969.4	10660.2
47.5°	9651.6	9501.9	9340.2	9417.6
55°	5443.6	4383.7	3241.6	2679.1
65°	947.3	961.4	470.8	448.1
75°	99.9	112.1	76.2	59.1
85°	49.1	45.6	44.2	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)