

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: P212882

Luminaire Tested: **NFFLD-C25-D-UNV-33**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P212882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-16-1196-4)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-C25-D-UNV-33
Description: NIGHT FALCON LED FLOOD LIGHT
Light Source: (8) 4000K CCT, 72 CRI LEDS
CLU028-1204C4-40ALK3
Ballast/Driver: OSRAM
OT100/UNV/800C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10380.2 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1.33' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G1

Input Watts (W): 93.2
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

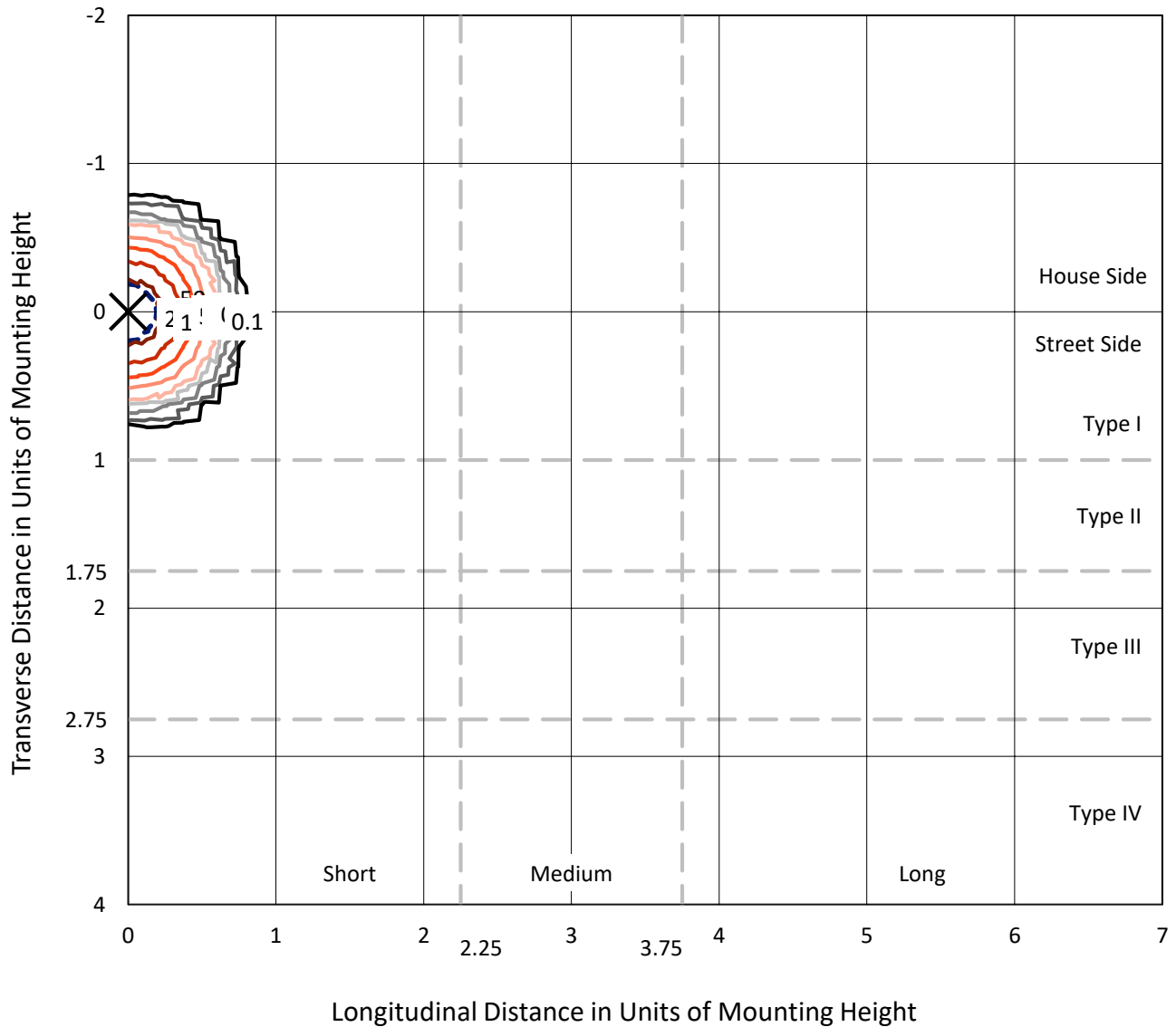


REPORT NUMBER: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

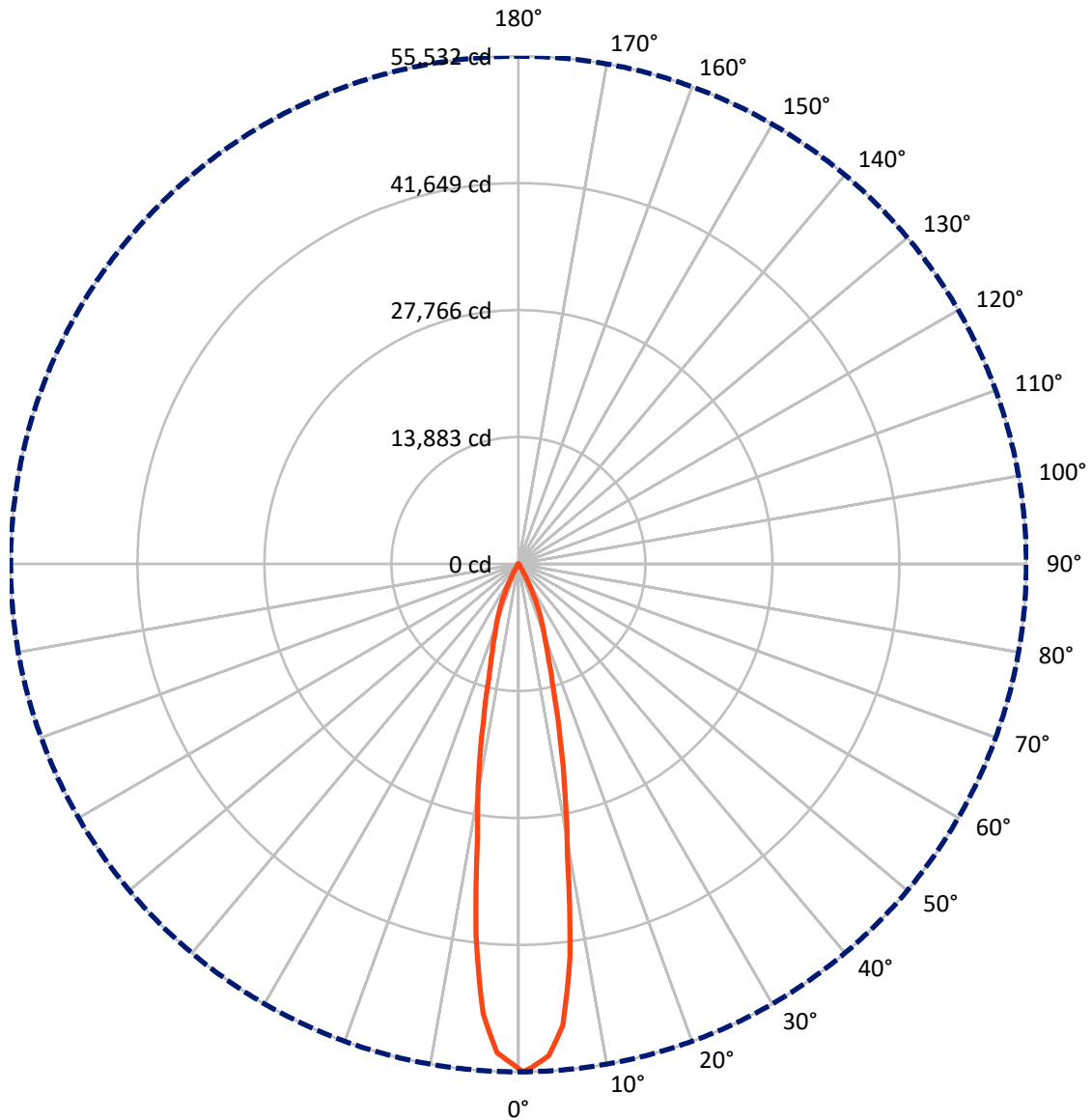


Based on 20 foot mounting height. Maximum calculated value = 138.8 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

Luminous Intensity Polar Plot



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

REPORT NUMBER: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

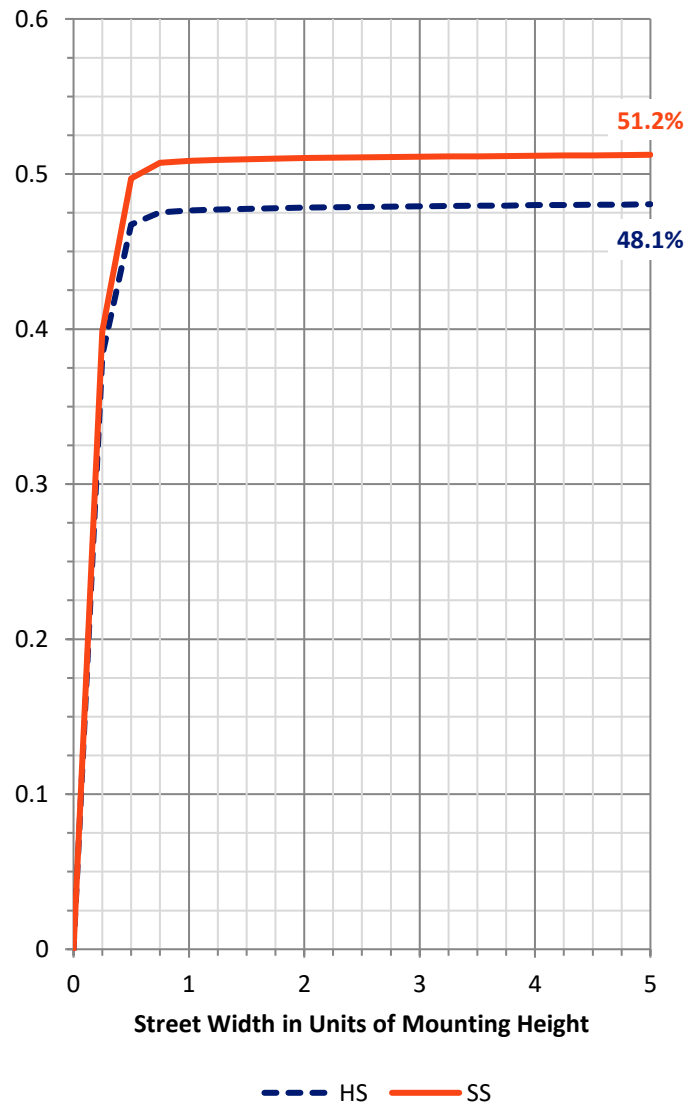
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5071.6	0.0	5071.6
	% Fixture	48.9	0.0	48.9
Street Side	Lumens	5308.6	0.0	5308.6
	% Fixture	51.1	0.0	51.1
Total	Lumens	10380.2	0.0	10380.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3963.6	38.2
10°-20°	4101.9	39.5
20°-30°	1939.9	18.7
30°-40°	359.7	3.5
40°-50°	41.6	0.4
50°-60°	24.6	0.2
60°-70°	21.0	0.2
70°-80°	38.8	0.4
80°-90°	27.4	0.3
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°	10380.2	100.0
0°-180°	10380.2	100.0



REPORT NUMBER: P212882

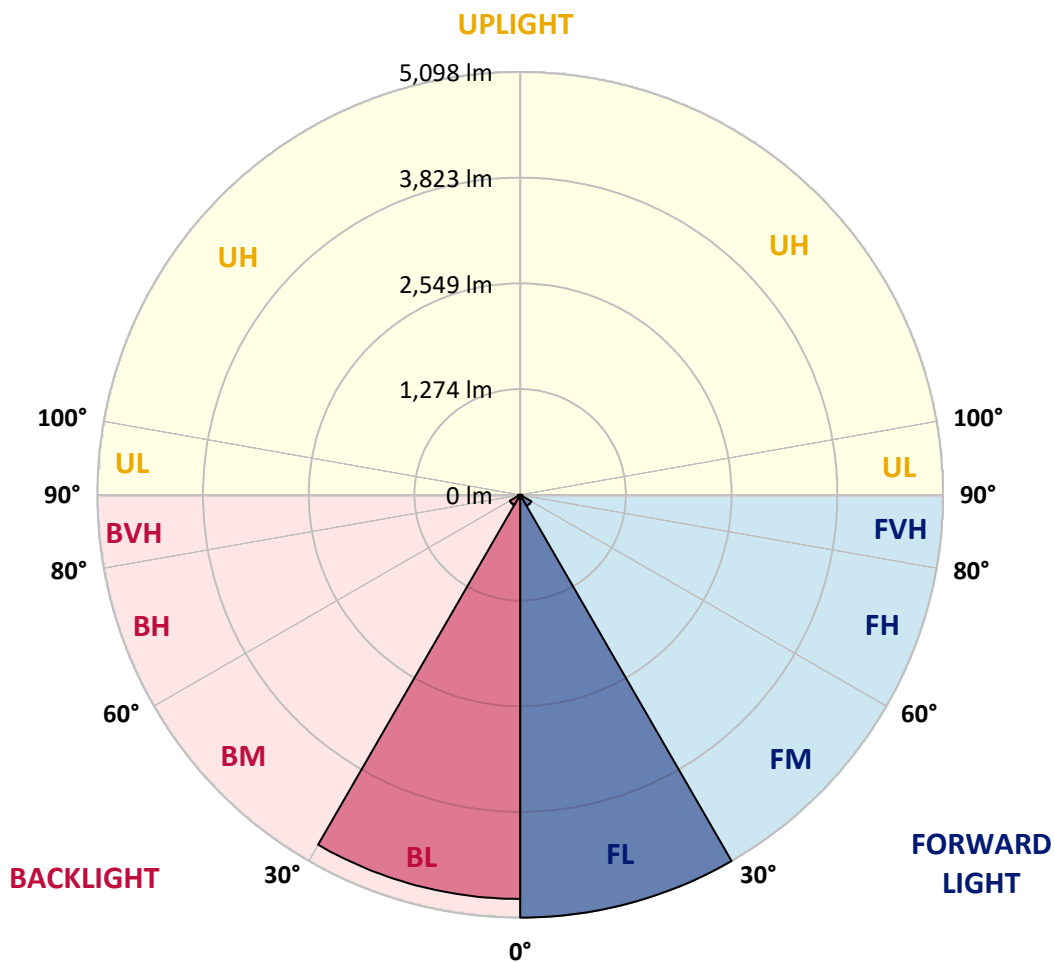
CATALOG NUMBER: NFFLD-C25-D-UNV-33

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5098.0	49.1			
FM	(30°-60°)	156.8	1.5			
FH	(60°-80°)	26.5	0.3			G0/660
FVH	(80°-90°)	26.5	0.3			G1/100
BL	(0°-30°)	4872.4	46.9	B4/5000		
BM	(30°-60°)	143.9	1.4	B0/220		
BH	(60°-80°)	27.3	0.3	B0/110		G0/660
BVH	(80°-90°)	27.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G1

Type V Short





REPORT NUMBER: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0
1°	55062.7	55063.2	55078.6	55108.9	55153.5	55211.4	55280.7	55359.1	55443.9	55532.0	55397.8
3°	53882.4	53821.3	53807.9	53561.3	53407.9	53353.1	53398.7	53542.5	53515.8	53540.0	53424.4
5°	50671.0	50636.6	50144.2	49919.6	49849.3	49688.0	49490.4	49463.8	49757.8	49781.6	49603.9
7°	43255.1	43181.6	42699.6	42449.9	42438.8	42342.2	42004.3	41883.3	42017.9	41971.1	41534.0
9°	32430.4	32551.0	32946.8	32803.2	32649.8	32758.7	32752.4	32607.5	32039.2	31935.7	31656.3
11°	25601.4	25495.6	25541.0	25377.1	25626.5	25500.0	25320.4	25331.3	25165.8	25071.8	24840.1
13°	19565.9	19508.5	19578.3	19630.0	19580.8	19515.9	19484.5	19383.4	19162.4	19085.0	18808.6
15°	14345.8	14456.3	14528.0	14423.5	14483.2	14435.0	14225.7	14273.8	13976.1	13777.8	13702.9
17°	10998.8	11068.9	11069.1	11026.5	11005.0	10900.4	10873.5	10795.6	10673.0	10506.2	10510.9
19.5°	8257.4	8288.5	8364.9	8356.9	8360.5	8315.8	8233.1	8213.2	8089.8	8174.7	7978.9
22.5°	6011.5	6002.7	6008.6	6098.4	6114.5	6101.8	6061.6	6004.9	5971.0	6169.7	5886.9
25.5°	3783.0	3812.1	3914.0	4057.4	4115.6	4117.9	4092.3	4067.1	4020.8	3982.5	3945.2
29°	1543.7	1621.6	1807.7	1864.7	1963.1	1955.7	1981.0	2006.5	1869.7	1769.3	1799.4
33°	231.4	298.9	469.1	382.0	474.8	467.3	510.3	542.9	413.5	302.5	397.4
37.5°	55.9	75.8	97.2	88.0	89.2	87.2	95.4	86.0	84.0	69.6	83.4
42.5°	53.0	65.3	68.7	71.1	69.2	60.2	58.1	53.2	57.6	61.7	53.5
47.5°	23.9	46.4	48.4	55.4	49.7	46.3	40.8	38.9	42.8	47.2	36.1
55°	2.9	31.8	29.8	28.4	19.9	14.7	10.7	11.4	9.9	8.7	12.8
65°	2.9	31.9	35.8	21.1	16.2	16.4	14.8	13.3	16.6	16.0	15.5
75°	0.0	29.6	24.8	24.6	16.6	22.6	31.3	29.1	40.3	31.2	41.1
85°	2.9	17.3	34.3	78.4	82.3	91.5	92.0	99.7	102.2	109.5	96.8
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: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0
1°	55268.2	55147.5	55039.8	54948.5	54876.4	54825.5	54797.1	54791.4	54797.1	54825.5	54876.4
3°	53352.3	53059.5	52904.6	52898.3	53040.7	53321.3	53373.5	53487.1	53373.5	53321.3	53040.7
5°	49074.0	48852.0	48781.4	48604.3	48476.5	48635.2	49139.6	49275.3	49139.6	48635.2	48476.5
7°	41015.7	40893.8	41053.6	40814.8	40141.8	39944.5	40479.7	40840.9	40479.7	39944.5	40141.8
9°	31798.5	31533.2	31177.3	30989.4	30954.0	30472.1	30089.3	30140.3	30089.3	30472.1	30954.0
11°	24673.9	24414.2	24252.8	24061.9	24000.0	23677.1	23673.4	23939.4	23673.4	23677.1	24000.0
13°	18698.7	18516.1	18312.2	18117.2	17984.4	17851.4	17561.6	17736.4	17561.6	17851.4	17984.4
15°	13735.0	13474.2	13459.5	13335.4	13077.2	13228.0	12977.7	12860.9	12977.7	13228.0	13077.2
17°	10481.3	10393.2	10276.2	10259.9	10201.3	10195.3	10142.7	10048.5	10142.7	10195.3	10201.3
19.5°	8021.2	7957.9	7900.9	7822.5	7779.6	7795.6	7742.5	7679.2	7742.5	7795.6	7779.6
22.5°	5850.3	5842.8	5855.3	5775.8	5744.2	5683.0	5669.9	5630.7	5669.9	5683.0	5744.2
25.5°	3923.2	3869.7	3837.3	3811.0	3712.6	3692.0	3574.7	3520.4	3574.7	3692.0	3712.6
29°	1889.1	1791.7	1726.4	1726.8	1633.9	1655.6	1488.8	1394.2	1488.8	1655.6	1633.9
33°	495.2	436.9	386.9	391.0	307.6	400.8	254.7	171.2	254.7	400.8	307.6
37.5°	86.7	80.2	78.2	80.5	81.5	94.7	80.7	76.9	80.7	94.7	81.5
42.5°	52.4	49.3	58.7	71.3	72.9	71.8	64.3	53.0	64.3	71.8	72.9
47.5°	37.0	31.6	43.0	52.0	60.5	51.9	44.8	29.7	44.8	51.9	60.5
55°	5.6	10.2	16.9	27.3	27.3	34.1	30.5	8.7	30.5	34.1	27.3
65°	10.0	12.5	22.3	18.7	24.8	31.1	31.8	2.9	31.8	31.1	24.8
75°	26.4	30.1	30.7	18.9	30.1	22.1	31.2	0.0	31.2	22.1	30.1
85°	99.8	93.3	93.6	87.4	73.4	40.7	30.8	0.0	30.8	40.7	73.4
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: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0	55532.0
1°	54948.5	55039.8	55147.5	55268.2	55397.8	55532.0	55443.9	55359.1	55280.7	55211.4	55153.5
3°	52898.3	52904.6	53059.5	53352.3	53424.4	53540.0	53515.8	53542.5	53398.7	53353.1	53407.9
5°	48604.3	48781.4	48852.0	49074.0	49603.9	49781.6	49757.8	49463.8	49490.4	49688.0	49849.3
7°	40814.8	41053.6	40893.8	41015.7	41534.0	41971.1	42017.9	41883.3	42004.3	42342.2	42438.8
9°	30989.4	31177.3	31533.2	31798.5	31656.3	31935.7	32039.2	32607.5	32752.4	32758.7	32649.8
11°	24061.9	24252.8	24414.2	24673.9	24840.1	25071.8	25165.8	25331.3	25320.4	25500.0	25626.5
13°	18117.2	18312.2	18516.1	18698.7	18808.6	19085.0	19162.4	19383.4	19484.5	19515.9	19580.8
15°	13335.4	13459.5	13474.2	13735.0	13702.9	13777.8	13976.1	14273.8	14225.7	14435.0	14483.2
17°	10259.9	10276.2	10393.2	10481.3	10510.9	10506.2	10673.0	10795.6	10873.5	10900.4	11005.0
19.5°	7822.5	7900.9	7957.9	8021.2	7978.9	8174.7	8089.8	8213.2	8233.1	8315.8	8360.5
22.5°	5775.8	5855.3	5842.8	5850.3	5886.9	6169.7	5971.0	6004.9	6061.6	6101.8	6114.5
25.5°	3811.0	3837.3	3869.7	3923.2	3945.2	3982.5	4020.8	4067.1	4092.3	4117.9	4115.6
29°	1726.8	1726.4	1791.7	1889.1	1799.4	1769.3	1869.7	2006.5	1981.0	1955.7	1963.1
33°	391.0	386.9	436.9	495.2	397.4	302.5	413.5	542.9	510.3	467.3	474.8
37.5°	80.5	78.2	80.2	86.7	83.4	69.6	84.0	86.0	95.4	87.2	89.2
42.5°	71.3	58.7	49.3	52.4	53.5	61.7	57.6	53.2	58.1	60.2	69.2
47.5°	52.0	43.0	31.6	37.0	36.1	47.2	42.8	38.9	40.8	46.3	49.7
55°	27.3	16.9	10.2	5.6	12.8	8.7	9.9	11.4	10.7	14.7	19.9
65°	18.7	22.3	12.5	10.0	15.5	16.0	16.6	13.3	14.8	16.4	16.2
75°	18.9	30.7	30.1	26.4	41.1	31.2	40.3	29.1	31.3	22.6	16.6
85°	87.4	93.6	93.3	99.8	96.8	109.5	102.2	99.7	92.0	91.5	82.3
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: P212882

CATALOG NUMBER: NFFLD-C25-D-UNV-33

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	55532.0	55532.0	55532.0	55532.0
1°	55108.9	55078.6	55063.2	55062.7
3°	53561.3	53807.9	53821.3	53882.4
5°	49919.6	50144.2	50636.6	50671.0
7°	42449.9	42699.6	43181.6	43255.1
9°	32803.2	32946.8	32551.0	32430.4
11°	25377.1	25541.0	25495.6	25601.4
13°	19630.0	19578.3	19508.5	19565.9
15°	14423.5	14528.0	14456.3	14345.8
17°	11026.5	11069.1	11068.9	10998.8
19.5°	8356.9	8364.9	8288.5	8257.4
22.5°	6098.4	6008.6	6002.7	6011.5
25.5°	4057.4	3914.0	3812.1	3783.0
29°	1864.7	1807.7	1621.6	1543.7
33°	382.0	469.1	298.9	231.4
37.5°	88.0	97.2	75.8	55.9
42.5°	71.1	68.7	65.3	53.0
47.5°	55.4	48.4	46.4	23.9
55°	28.4	29.8	31.8	2.9
65°	21.1	35.8	31.9	2.9
75°	24.6	24.8	29.6	0.0
85°	78.4	34.3	17.3	2.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)