

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: P214473

Luminaire Tested: **NFFLD-L-C100-D-UNV-33-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29595)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-L-C100-D-UNV-33-7030
Description: NIGHT CONDOR LED FLOODLIGHT SPOT OPTIC
Light Source: (16) 3000K CCT, 70 CRI LEDS
CLU028-1204C4-40ALK3
Ballast/Driver: OSRAM
OT180/UNV/1250C/2DIMLT2

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28457.5 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Luminous Opening: (L: 0 ' x W: 0.66 ' x H: 0.5 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G1

Input Watts (W): 284
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

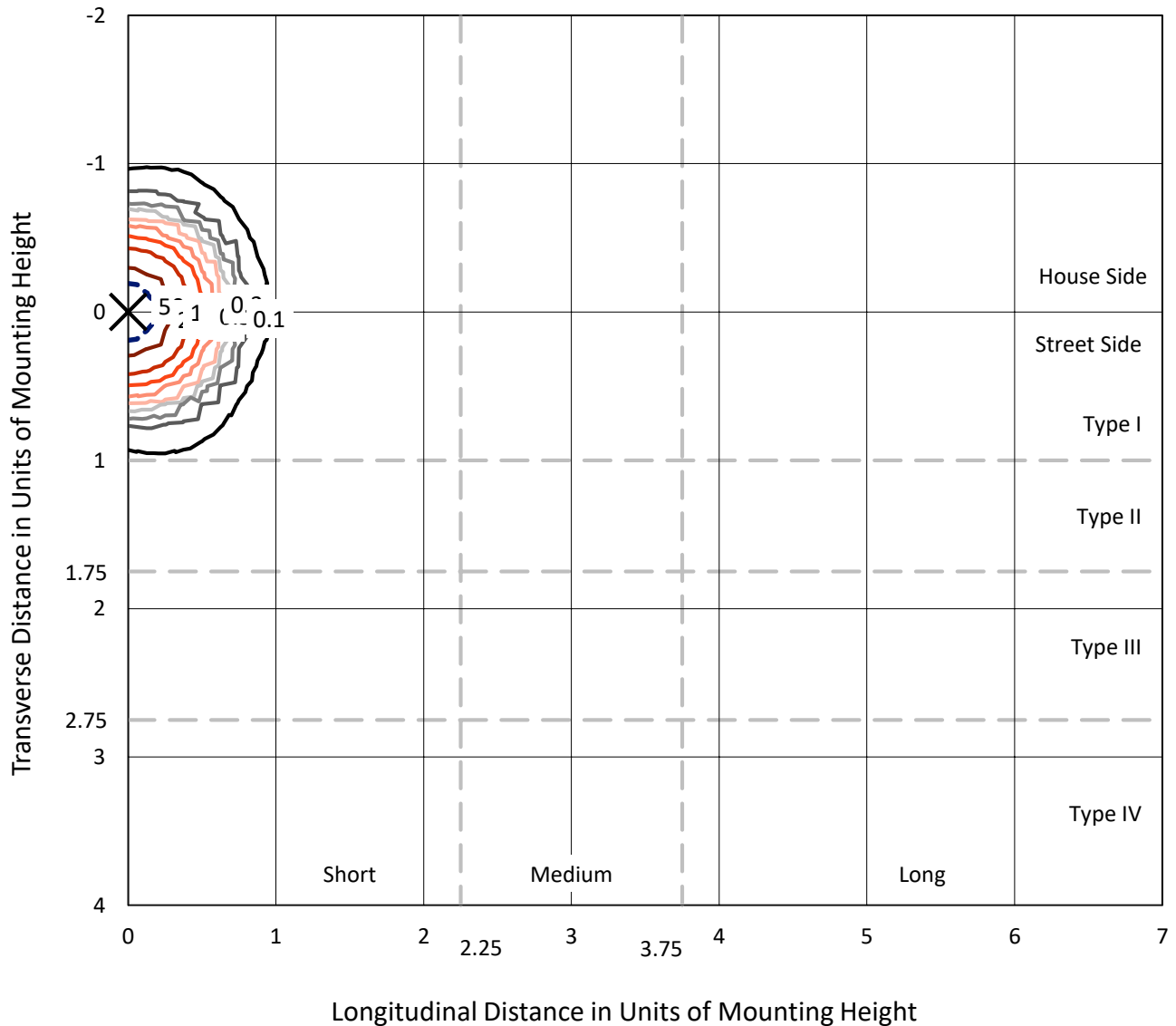


REPORT NUMBER: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

Iso-Footcandle Lines of Horizontal Illumination

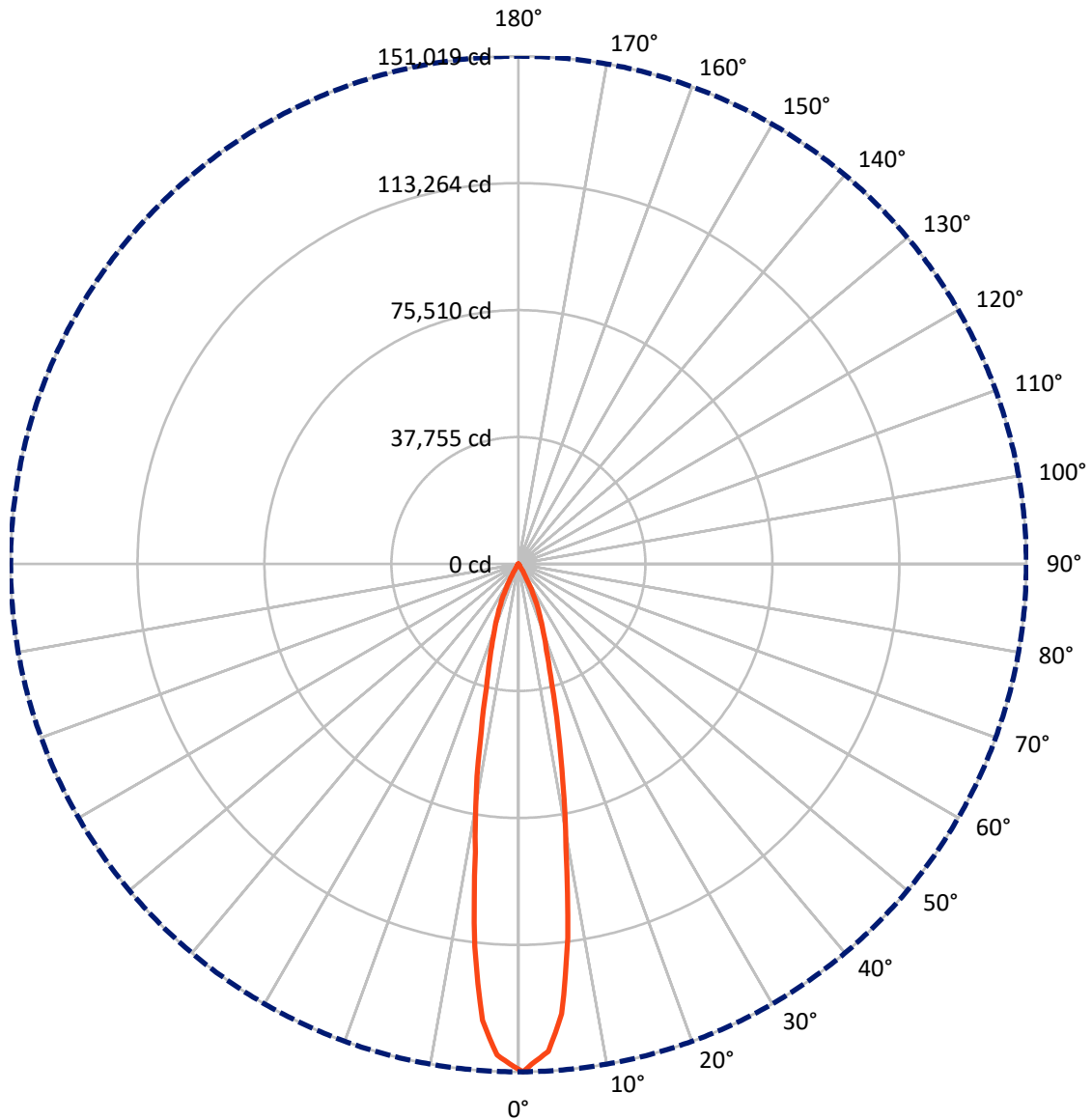
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 241.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P214473
CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

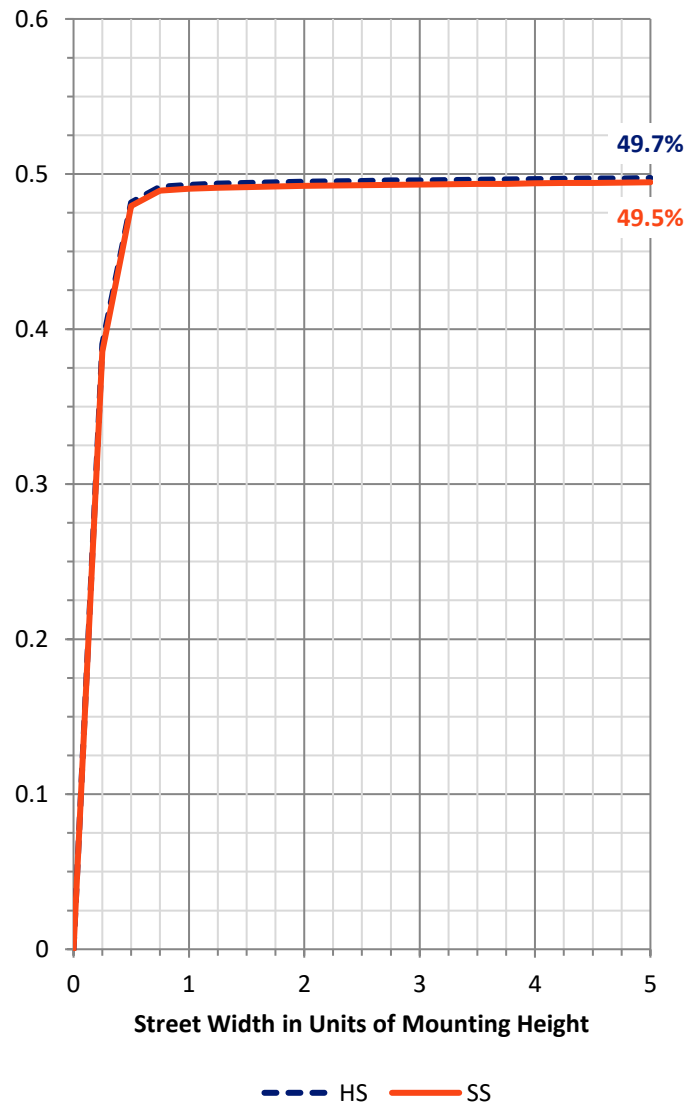
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14397.7	0.0	14397.7
	% Fixture	50.6	0.0	50.6
Street Side	Lumens	14059.8	0.0	14059.8
	% Fixture	49.4	0.0	49.4
Total	Lumens	28457.5	0.0	28457.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10742.4	37.7
10°-20°	11180.5	39.3
20°-30°	5414.9	19.0
30°-40°	1051.2	3.7
40°-50°	125.4	0.4
50°-60°	66.3	0.2
60°-70°	51.5	0.2
70°-80°	114.9	0.4
80°-90°	87.5	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°	28457.5	100.0
0°-180°	28457.5	100.0



REPORT NUMBER: P214473

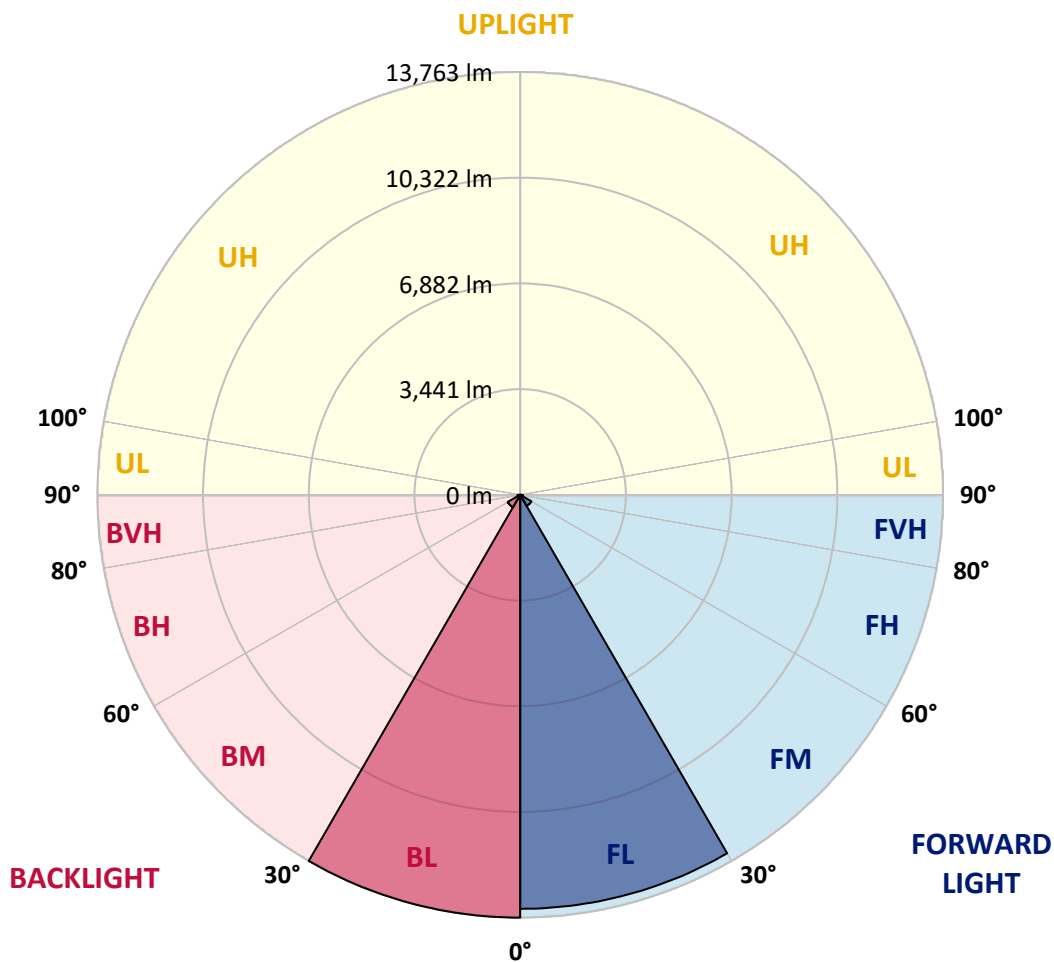
CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	13475.2	47.4			
FM	(30°-60°)	423.3	1.5			
FH	(60°-80°)	68.9	0.2			G0/660
FVH	(80°-90°)	90.3	0.3			G1/100
BL	(0°-30°)	13763.2	48.4	B5		
BM	(30°-60°)	468.1	1.6	B1/1000		
BH	(60°-80°)	73.3	0.3	B0/110		G0/660
BVH	(80°-90°)	90.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G1

Type V Short





REPORT NUMBER: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
1°	#####	148934.3	149103.7	149305.5	149524.5	149749.5	149973.5	150194.6	150414.9	150639.8	150425.2
3°	#####	145177.1	145292.4	144658.1	144360.3	144418.3	144830.7	145574.9	145771.3	146105.4	146042.7
5°	#####	134243.4	132917.8	132539.1	132841.7	132987.3	132835.5	133141.1	134405.6	134953.4	134839.0
7°	#####	111839.5	110500.2	110469.9	111057.2	111257.8	111077.8	111352.7	112574.5	113540.2	113179.7
9°	85452.7	85423.8	85681.2	85694.6	85507.1	85601.6	86133.8	86296.9	85325.4	85488.6	85444.6
11°	66371.4	66291.5	66221.2	66386.8	66834.0	67066.3	67020.0	67279.3	67435.6	67714.1	67462.8
13°	50212.3	50010.7	50215.3	50508.3	50678.1	50886.3	51009.8	51109.3	51038.8	51432.5	51410.6
15°	36915.5	37042.8	37400.0	37178.9	37553.8	37617.5	37080.3	37658.9	37340.2	37287.7	37645.7
17°	28518.4	28676.5	28776.2	28746.9	28858.7	28659.2	28804.4	28853.3	28800.3	28689.6	28995.6
19.5°	21646.1	21789.1	21957.7	21819.5	21933.7	21975.9	21988.3	22142.6	22200.5	22487.1	22291.6
22.5°	15778.0	15838.9	15889.2	16052.8	16092.0	16192.8	16218.7	16225.2	16422.6	16620.0	16568.3
25.5°	10078.1	10197.8	10337.5	10530.5	10707.7	10767.1	10789.9	10905.8	10934.5	10968.8	11047.3
29°	4128.4	4438.2	4763.6	4775.1	5000.2	4984.0	5119.3	5304.8	5082.6	4963.4	5175.5
33°	578.3	849.1	1234.3	986.7	1203.7	1166.1	1291.2	1448.9	1154.3	877.8	1198.7
37.5°	208.0	248.8	284.6	264.2	260.8	261.8	276.5	272.3	271.8	218.0	284.8
42.5°	164.2	186.3	207.9	204.1	203.7	180.3	172.1	165.3	174.7	172.2	179.7
47.5°	100.5	121.1	142.0	154.6	139.7	121.1	97.9	100.5	119.0	126.4	108.4
55°	31.8	69.6	85.2	78.6	58.0	44.6	26.0	16.0	31.7	15.9	26.1
65°	23.9	79.4	73.0	51.3	41.0	31.0	27.0	23.8	31.8	27.9	38.9
75°	8.0	75.8	46.7	34.9	46.5	61.9	80.3	81.5	114.5	100.5	127.9
85°	0.0	44.0	120.2	233.5	297.2	322.6	333.6	356.9	361.9	391.1	366.4
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: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
1°	150224.1	150038.2	149870.3	149723.9	149603.3	149513.8	149461.3	149451.4	149461.3	149513.8	149603.3
3°	146071.1	145412.5	145036.6	144962.0	145190.5	145708.0	145830.0	146121.3	145830.0	145708.0	145190.5
5°	133777.8	133670.1	134192.8	134783.0	134709.1	134767.6	135661.8	136066.1	135661.8	134767.6	134709.1
7°	112352.6	112326.1	112862.0	113240.7	113736.2	113921.2	114000.7	114572.3	114000.7	113921.2	113736.2
9°	86789.9	87195.1	87009.1	86724.8	87346.5	88830.0	86980.1	86550.5	86980.1	88830.0	87346.5
11°	67434.0	67391.9	67798.0	67897.0	67203.6	68079.5	67530.8	68856.6	67530.8	68079.5	67203.6
13°	51720.6	51358.3	51398.2	51586.7	51740.4	51597.7	51628.4	51038.3	51628.4	51597.7	51740.4
15°	38423.3	38157.1	38088.8	38233.5	38137.0	38448.7	38555.3	37804.3	38555.3	38448.7	38137.0
17°	29255.9	29431.4	29540.3	29339.6	29544.4	29847.1	29907.5	29993.4	29907.5	29847.1	29544.4
19.5°	22388.3	22342.0	22561.1	22660.1	22569.1	22851.4	22817.0	22892.2	22817.0	22851.4	22569.1
22.5°	16521.5	16612.7	16746.6	16734.7	16766.6	16720.4	16764.3	16527.4	16764.3	16720.4	16766.6
25.5°	11197.2	11238.2	11304.4	11302.6	11300.9	11241.2	11135.7	11262.5	11135.7	11241.2	11300.9
29°	5479.4	5418.3	5379.8	5462.4	5308.4	5506.8	5237.0	5237.1	5237.0	5506.8	5308.4
33°	1518.6	1429.8	1340.0	1397.4	1171.5	1517.3	1156.7	890.8	1156.7	1517.3	1171.5
37.5°	288.5	305.9	304.0	296.2	292.0	324.1	284.5	232.9	284.5	324.1	292.0
42.5°	179.6	177.9	193.8	208.1	204.9	214.2	199.7	192.1	199.7	214.2	204.9
47.5°	109.6	117.2	133.1	136.5	153.5	156.5	135.9	108.5	135.9	156.5	153.5
55°	23.1	31.6	42.0	60.6	80.8	89.1	74.0	35.8	74.0	89.1	80.8
65°	33.5	32.9	29.2	44.2	55.9	77.6	85.3	23.9	85.3	77.6	55.9
75°	86.0	87.4	65.7	54.8	37.2	53.8	73.9	8.0	73.9	53.8	37.2
85°	359.3	329.6	324.1	304.0	240.1	118.6	30.0	11.9	30.0	118.6	240.1
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: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
1°	149723.9	149870.3	150038.2	150224.1	150425.2	150639.8	150414.9	150194.6	149973.5	149749.5	149524.5
3°	144962.0	145036.6	145412.5	146071.1	146042.7	146105.4	145771.3	145574.9	144830.7	144418.3	144360.3
5°	134783.0	134192.8	133670.1	133777.8	134839.0	134953.4	134405.6	133141.1	132835.5	132987.3	132841.7
7°	113240.7	112862.0	112326.1	112352.6	113179.7	113540.2	112574.5	111352.7	111077.8	111257.8	111057.2
9°	86724.8	87009.1	87195.1	86789.9	85444.6	85488.6	85325.4	86296.9	86133.8	85601.6	85507.1
11°	67897.0	67798.0	67391.9	67434.0	67462.8	67714.1	67435.6	67279.3	67020.0	67066.3	66834.0
13°	51586.7	51398.2	51358.3	51720.6	51410.6	51432.5	51038.8	51109.3	51009.8	50886.3	50678.1
15°	38233.5	38088.8	38157.1	38423.3	37645.7	37287.7	37340.2	37658.9	37080.3	37617.5	37553.8
17°	29339.6	29540.3	29431.4	29255.9	28995.6	28689.6	28800.3	28853.3	28804.4	28659.2	28858.7
19.5°	22660.1	22561.1	22342.0	22388.3	22291.6	22487.1	22200.5	22142.6	21988.3	21975.9	21933.7
22.5°	16734.7	16746.6	16612.7	16521.5	16568.3	16620.0	16422.6	16225.2	16218.7	16192.8	16092.0
25.5°	11302.6	11304.4	11238.2	11197.2	11047.3	10968.8	10934.5	10905.8	10789.9	10767.1	10707.7
29°	5462.4	5379.8	5418.3	5479.4	5175.5	4963.4	5082.6	5304.8	5119.3	4984.0	5000.2
33°	1397.4	1340.0	1429.8	1518.6	1198.7	877.8	1154.3	1448.9	1291.2	1166.1	1203.7
37.5°	296.2	304.0	305.9	288.5	284.8	218.0	271.8	272.3	276.5	261.8	260.8
42.5°	208.1	193.8	177.9	179.6	179.7	172.2	174.7	165.3	172.1	180.3	203.7
47.5°	136.5	133.1	117.2	109.6	108.4	126.4	119.0	100.5	97.9	121.1	139.7
55°	60.6	42.0	31.6	23.1	26.1	15.9	31.7	16.0	26.0	44.6	58.0
65°	44.2	29.2	32.9	33.5	38.9	27.9	31.8	23.8	27.0	31.0	41.0
75°	54.8	65.7	87.4	86.0	127.9	100.5	114.5	81.5	80.3	61.9	46.5
85°	304.0	324.1	329.6	359.3	366.4	391.1	361.9	356.9	333.6	322.6	297.2
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: P214473

CATALOG NUMBER: NFFLD-L-C100-D-UNV-33-7030

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	#####	#####	#####	#####
1°	149305.5	149103.7	148934.3	148814.5
3°	144658.1	145292.4	145177.1	145223.6
5°	132539.1	132917.8	134243.4	134362.2
7°	110469.9	110500.2	111839.5	112163.7
9°	85694.6	85681.2	85423.8	85452.7
11°	66386.8	66221.2	66291.5	66371.4
13°	50508.3	50215.3	50010.7	50212.3
15°	37178.9	37400.0	37042.8	36915.5
17°	28746.9	28776.2	28676.5	28518.4
19.5°	21819.5	21957.7	21789.1	21646.1
22.5°	16052.8	15889.2	15838.9	15778.0
25.5°	10530.5	10337.5	10197.8	10078.1
29°	4775.1	4763.6	4438.2	4128.4
33°	986.7	1234.3	849.1	578.3
37.5°	264.2	284.6	248.8	208.0
42.5°	204.1	207.9	186.3	164.2
47.5°	154.6	142.0	121.1	100.5
55°	78.6	85.2	69.6	31.8
65°	51.3	73.0	79.4	23.9
75°	34.9	46.7	75.8	8.0
85°	233.5	120.2	44.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)