

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: P196706

Luminaire Tested: **NAV-AF-02-D-UNV-SLR-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196706  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-02-D-UNV-SLR-7030-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6854.9 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 66  
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

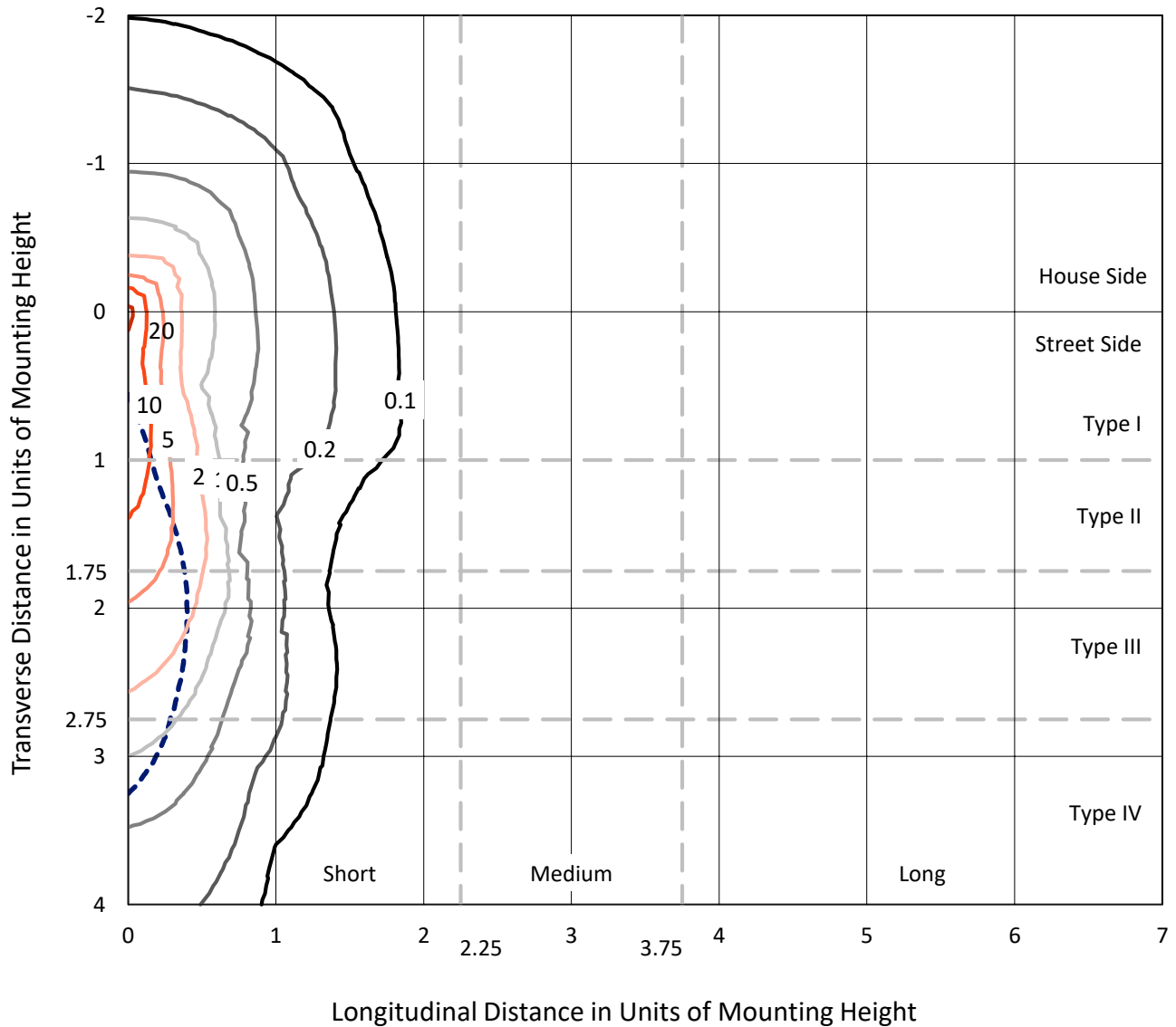


REPORT NUMBER: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

### Iso-Footcandle Lines of Horizontal Illumination

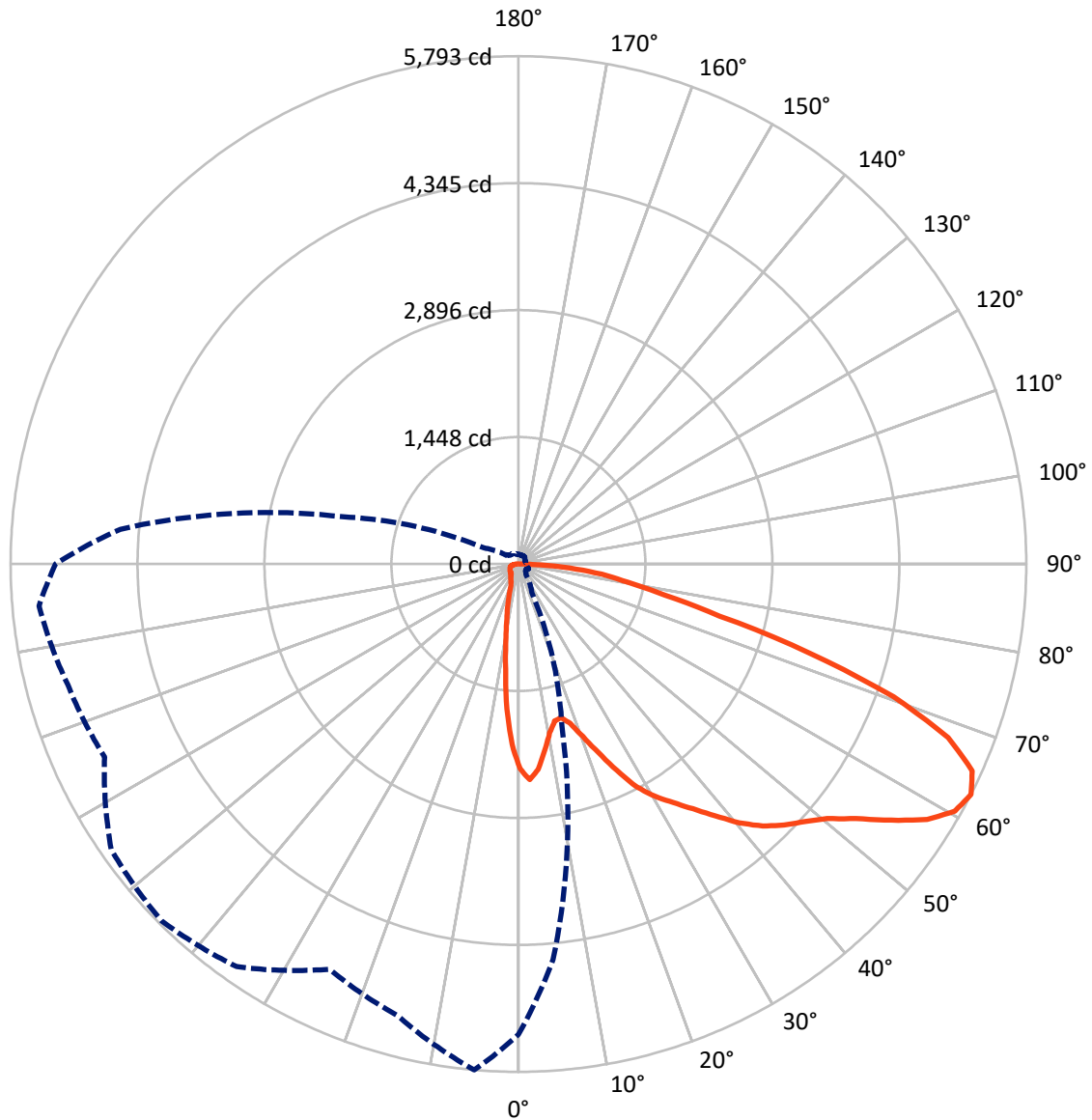
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.4 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P196706  
CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1214.4	0.0	1214.4
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	5640.6	0.0	5640.6
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	6854.9	0.0	6854.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.0	2.5
10°-20°	310.4	4.5
20°-30°	446.5	6.5
30°-40°	683.8	10.0
40°-50°	999.8	14.6
50°-60°	1454.7	21.2
60°-70°	1685.4	24.6
70°-80°	878.6	12.8
80°-90°	225.8	3.3
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°	6854.9	100.0
0°-180°	6854.9	100.0



REPORT NUMBER: P196706

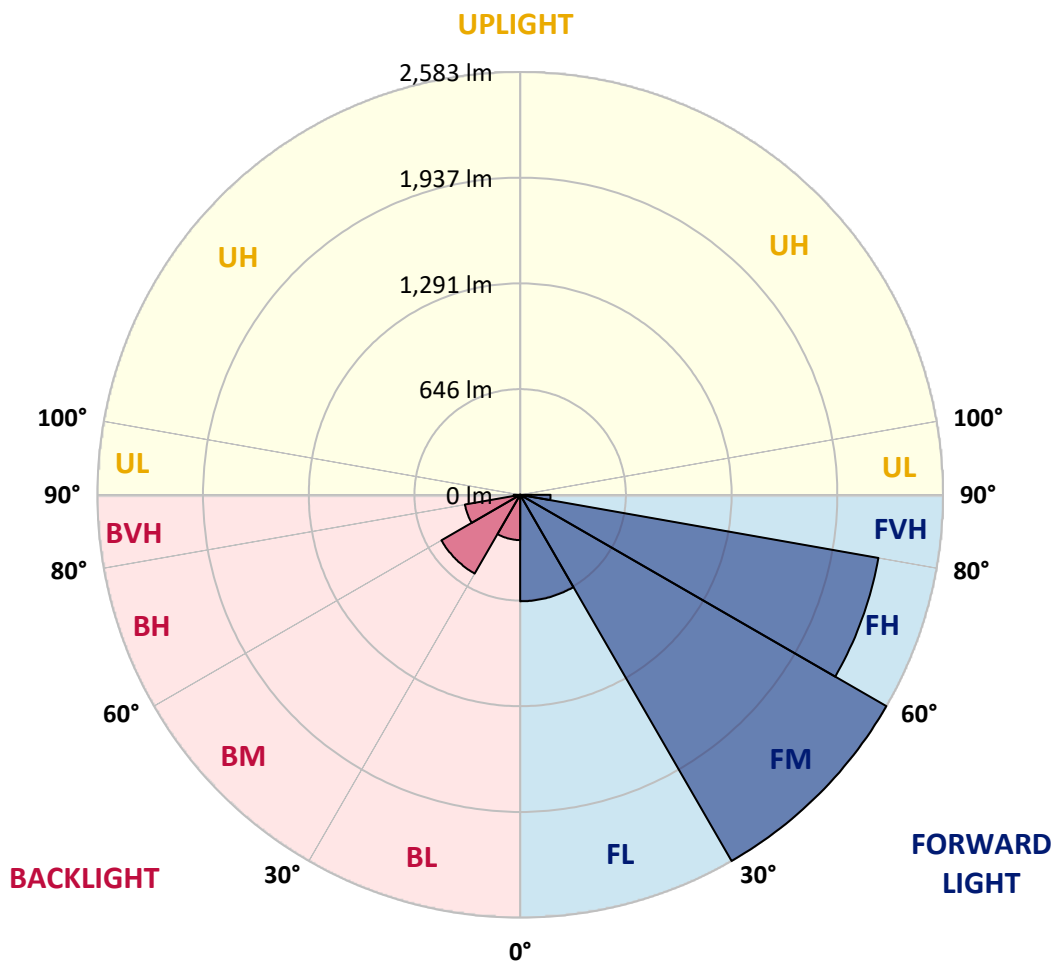
CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	650.6	9.5			
FM	(30°-60°)	2582.6	37.7			
FH	(60°-80°)	2221.6	32.4			G2/5000
FVH	(80°-90°)	185.8	2.7			G2/225
BL	(0°-30°)	276.3	4.0	B1/500		
BM	(30°-60°)	555.6	8.1	B1/1000		
BH	(60°-80°)	342.4	5.0	B1/500		G1/500
BVH	(80°-90°)	40.0	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	2412.6	2378.7	2300.7	2232.0	2146.6	2082.5	2004.5	1963.2	1932.9	1912.5	1896.0
5°	2253.5	2172.0	2022.8	1892.2	1751.0	1649.2	1529.8	1464.7	1424.4	1402.6	1392.6
7.5°	2017.4	1909.6	1716.7	1541.2	1364.8	1237.6	1147.1	1050.7	999.5	966.2	955.3
10°	1811.1	1689.3	1459.2	1262.0	1125.7	1035.3	957.7	869.2	803.7	746.6	725.2
12.5°	1691.4	1549.8	1287.3	1108.9	994.6	897.6	815.6	720.1	651.0	591.4	568.5
15°	1665.9	1508.0	1215.2	1011.4	871.3	754.4	656.1	552.2	484.6	435.4	419.4
17.5°	1742.5	1547.7	1184.9	922.4	753.5	610.9	489.6	378.2	322.1	295.2	288.8
20°	1900.1	1635.2	1170.5	842.5	639.1	470.2	338.4	257.0	229.1	221.1	220.7
22.5°	2107.4	1777.3	1186.3	776.9	531.8	346.9	248.0	211.2	199.8	195.3	195.3
25°	2341.4	1969.7	1228.6	726.7	437.4	269.9	213.7	193.8	184.4	180.0	180.4
27.5°	2627.6	2203.8	1286.3	680.4	369.8	236.5	199.8	182.9	173.5	169.1	169.5
30°	2843.5	2405.2	1336.0	638.2	335.0	223.1	192.3	176.5	166.0	159.5	159.1
32.5°	3045.3	2582.6	1376.2	607.8	315.1	199.3	173.9	162.0	153.1	145.7	144.1
35°	3268.4	2749.5	1395.1	606.8	302.2	180.0	159.1	144.7	135.7	127.3	125.7
37.5°	3521.4	2953.9	1411.1	612.8	295.2	167.5	152.1	138.2	130.7	122.3	120.3
40°	3784.8	3153.5	1423.4	617.8	294.2	159.1	146.6	134.2	126.7	117.8	115.9
42.5°	4010.9	3330.6	1440.4	615.7	287.3	157.6	143.1	130.7	123.8	114.8	112.3
45°	4191.8	3471.1	1466.7	615.3	276.9	161.0	142.1	129.7	121.3	111.9	109.8
47.5°	4360.3	3629.7	1522.4	613.3	265.4	160.1	147.6	128.7	120.3	110.8	109.4
50°	4553.2	3842.9	1617.2	598.4	249.5	153.1	157.6	127.8	117.8	109.4	107.8
52.5°	4821.6	4155.0	1758.0	571.5	227.6	145.7	159.1	127.3	113.8	106.3	104.4
55°	5137.2	4489.6	1909.6	532.8	198.9	132.8	151.1	125.2	109.8	101.9	98.9
57.5°	5381.2	4736.6	2015.4	477.1	170.5	125.2	134.7	120.7	104.9	96.9	94.4
60°	5449.9	4747.6	2034.3	410.5	156.0	120.3	115.9	131.6	100.8	92.5	89.9
62.5°	5367.8	4530.3	1911.1	363.9	151.1	115.3	105.3	125.7	96.9	88.5	86.0
65°	5124.8	4163.6	1635.2	356.8	156.0	110.8	99.9	100.4	93.0	84.4	82.1
67.5°	4557.2	3623.8	1288.2	361.3	162.0	106.3	95.9	91.4	88.5	81.0	78.0
70°	3706.3	2917.5	1014.9	369.3	167.5	100.4	90.9	85.4	83.0	75.1	73.5
72.5°	2854.8	2335.0	800.7	363.9	172.9	94.4	84.0	79.5	76.6	69.1	67.6
75°	2027.3	1855.3	588.5	312.2	158.5	86.0	76.1	72.1	69.6	61.6	61.1
77.5°	1461.3	1389.7	409.5	234.6	125.2	75.5	67.0	63.6	62.2	53.2	53.2
80°	1165.5	1057.6	245.1	153.1	91.4	62.6	56.2	54.6	53.2	44.2	44.7
82.5°	837.5	733.5	156.6	95.4	67.0	47.7	43.7	43.2	40.8	32.8	32.8
85°	429.4	374.8	100.4	64.1	47.2	30.8	28.9	27.9	26.3	20.4	20.4
87.5°	83.5	114.8	55.6	31.3	22.8	10.9	10.9	9.4	10.9	7.4	7.9
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: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	1927.5	1917.5	1910.5	1907.0	1957.3	1978.1	2001.9	2036.3	2059.6	2049.7	2081.5
5°	1439.4	1446.4	1462.2	1487.1	1557.2	1590.5	1611.8	1640.2	1660.5	1640.2	1674.0
7.5°	984.1	994.6	1028.3	1079.5	1164.0	1201.3	1208.7	1209.3	1204.8	1171.5	1194.3
10°	724.6	703.7	711.3	748.0	823.6	856.8	860.3	851.3	849.9	836.5	862.3
12.5°	561.6	532.8	515.9	521.8	578.5	605.9	610.3	615.3	635.7	642.1	673.9
15°	419.0	404.0	391.7	386.2	423.5	444.8	447.3	459.2	480.6	486.5	513.9
17.5°	294.8	298.8	305.2	307.7	334.5	348.4	344.3	344.3	347.9	346.5	361.8
20°	225.2	233.0	245.5	257.5	281.8	289.7	279.8	267.3	259.5	255.4	259.0
22.5°	198.9	204.4	212.2	227.6	248.0	252.0	239.1	229.1	221.7	217.7	218.2
25°	184.4	189.9	196.3	208.8	226.1	228.2	216.3	209.8	203.8	199.8	198.9
27.5°	172.0	175.5	179.4	187.4	205.3	206.3	198.3	194.4	190.3	187.4	186.4
30°	160.5	162.0	163.6	171.4	184.8	186.4	182.4	180.4	178.9	176.9	176.9
32.5°	145.7	147.6	150.1	157.0	170.0	172.0	169.5	168.0	165.5	164.6	163.1
35°	127.8	132.8	138.2	146.6	160.5	161.4	158.5	154.0	148.1	146.6	145.7
37.5°	120.3	121.3	128.3	138.2	152.6	153.6	149.5	142.1	137.6	138.2	139.2
40°	115.3	116.8	120.7	130.7	145.1	146.6	143.1	137.6	133.2	133.8	135.2
42.5°	111.3	113.3	115.9	122.3	136.7	139.7	138.6	133.8	129.3	130.2	132.2
45°	109.4	110.8	110.8	115.3	129.3	133.8	134.2	130.2	126.7	127.8	130.2
47.5°	108.3	108.3	106.8	110.4	124.2	128.7	129.7	127.8	125.7	126.7	129.3
50°	106.8	104.9	103.4	106.3	120.3	124.2	125.2	123.8	124.8	126.7	128.3
52.5°	102.3	100.4	100.4	102.3	116.3	120.3	120.7	119.7	121.9	124.2	126.7
55°	96.9	96.9	97.5	99.4	114.2	117.4	116.8	115.9	117.8	120.7	123.3
57.5°	92.0	91.4	94.0	96.4	111.9	113.8	112.9	112.9	114.2	116.8	119.3
60°	88.9	86.6	88.5	92.5	109.4	111.3	109.8	109.4	111.9	113.8	115.9
62.5°	86.0	83.5	85.0	88.9	105.9	107.4	106.3	106.3	108.8	110.4	112.3
65°	81.5	80.6	81.5	85.4	102.9	103.4	103.4	103.9	105.9	106.8	108.8
67.5°	77.6	77.6	78.0	82.1	100.4	99.4	99.4	101.9	102.3	103.4	105.3
70°	72.5	73.5	73.5	78.5	98.5	94.9	95.4	97.5	98.5	99.4	99.9
72.5°	67.0	67.6	68.7	75.1	95.4	90.4	90.9	92.5	93.0	94.4	94.9
75°	61.1	61.6	63.2	71.6	93.4	86.0	85.0	86.0	87.0	88.0	87.5
77.5°	54.2	55.1	56.7	69.6	87.0	85.0	77.6	78.5	79.5	79.5	79.0
80°	45.8	47.2	49.7	66.6	73.5	82.1	69.1	69.6	70.0	70.0	69.1
82.5°	34.3	37.2	40.8	55.1	57.7	70.0	59.6	60.6	59.1	58.1	57.7
85°	22.4	24.8	29.8	38.2	42.3	55.1	49.1	49.7	46.8	46.2	46.2
87.5°	9.0	9.4	13.4	19.3	25.3	34.3	35.3	36.3	33.8	33.8	34.8
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: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	2129.7	2179.4	2236.5	2294.8	2342.4	2404.0	2463.7	2527.3	2559.6	2578.5	2631.7
5°	1726.7	1794.7	1875.8	1966.6	2042.3	2171.5	2310.7	2465.8	2540.3	2613.8	2753.0
7.5°	1235.0	1301.8	1396.2	1513.9	1621.3	1791.8	1975.2	2184.8	2288.3	2407.5	2635.7
10°	917.0	987.6	1073.0	1173.0	1278.9	1456.3	1662.1	1897.7	2011.5	2146.2	2405.6
12.5°	743.5	826.0	914.5	1004.0	1094.9	1214.2	1429.8	1691.9	1814.1	1949.8	2209.8
15°	580.0	668.4	763.9	861.3	951.7	1085.0	1305.2	1614.9	1754.4	1885.7	2098.5
17.5°	410.5	494.1	601.4	719.7	850.9	1008.5	1278.4	1648.6	1818.1	1955.3	2097.9
20°	279.8	337.5	444.8	585.0	747.0	946.8	1288.2	1767.4	1979.1	2129.7	2183.9
22.5°	223.7	251.0	323.5	466.2	657.5	902.1	1329.0	1930.4	2210.2	2393.7	2340.5
25°	203.3	218.7	256.4	368.3	578.0	872.2	1408.6	2145.7	2469.2	2655.1	2528.8
27.5°	190.8	204.4	228.7	302.6	509.4	852.9	1509.4	2399.2	2761.0	2913.5	2725.2
30°	182.9	196.3	218.7	271.8	457.8	824.1	1597.9	2630.8	2994.0	3092.9	2831.0
32.5°	167.5	178.0	196.3	243.5	419.0	790.3	1674.5	2838.0	3214.2	3247.0	2958.3
35°	151.6	162.6	181.0	220.7	396.2	763.9	1714.8	3021.9	3432.4	3401.1	3084.5
37.5°	145.7	154.6	171.4	204.4	383.7	746.6	1730.1	3202.8	3666.5	3571.5	3172.5
40°	141.6	149.5	164.6	193.4	380.2	730.1	1726.7	3374.8	3893.7	3748.0	3241.5
42.5°	138.6	145.7	159.5	185.8	370.8	714.7	1715.3	3523.4	4075.6	3900.1	3307.6
45°	136.1	143.6	157.6	189.9	353.4	697.8	1708.3	3659.1	4215.2	4028.4	3396.1
47.5°	135.2	143.6	158.1	188.9	334.5	678.9	1733.1	3809.7	4336.9	4136.2	3513.9
50°	133.8	143.1	169.1	180.0	308.6	655.5	1817.1	3989.0	4464.8	4257.5	3666.5
52.5°	131.2	142.7	180.4	172.9	275.4	623.3	1953.3	4242.5	4685.4	4493.5	3892.2
55°	128.3	143.6	172.4	162.0	240.1	581.5	2089.5	4590.0	5043.3	4874.3	4216.2
57.5°	124.8	142.1	163.1	152.1	210.8	528.9	2192.9	4874.7	5338.5	5267.0	4614.3
60°	122.3	145.7	146.6	146.1	191.9	478.7	2202.7	4856.3	5423.4	5521.9	5004.0
62.5°	119.3	148.6	133.8	141.6	182.4	431.9	2080.0	4555.7	5279.9	5489.0	5321.6
65°	115.3	129.7	126.7	137.6	182.4	407.1	1794.2	4055.1	4882.7	5178.9	5494.0
67.5°	111.3	117.8	121.9	132.2	186.4	383.7	1441.9	3420.5	4256.4	4678.5	5300.1
70°	105.9	111.3	116.3	127.3	184.4	367.3	1134.6	2741.6	3503.0	3986.1	4763.9
72.5°	100.8	104.9	109.8	119.7	184.4	359.8	911.6	2150.5	2674.4	3081.5	3946.3
75°	93.4	96.9	101.4	112.3	181.0	329.0	684.4	1723.1	1956.8	2211.7	3113.8
77.5°	86.0	88.5	92.0	102.9	163.1	274.9	484.1	1334.5	1449.8	1591.0	2427.4
80°	76.6	78.5	81.0	92.0	135.2	213.3	315.1	1043.8	1084.0	1152.1	1597.0
82.5°	65.5	68.7	69.1	79.0	108.8	154.6	187.4	715.2	714.7	814.6	1126.8
85°	53.6	55.1	56.2	62.2	80.6	102.9	123.3	390.7	348.4	488.1	978.6
87.5°	40.2	38.8	40.2	41.7	53.2	60.6	66.1	72.1	43.2	88.5	569.1
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: P196706

CATALOG NUMBER: NAV-AF-02-D-UNV-SLR-7030-600

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9	2336.9
2.5°	2660.0	2689.4	2671.9	2651.0	2599.0	2522.4	2463.7	2412.6
5°	2849.4	2903.6	2879.7	2802.2	2667.0	2513.4	2352.0	2253.5
7.5°	2825.6	2932.9	2923.4	2794.2	2600.4	2374.2	2147.2	2017.4
10°	2634.7	2785.2	2811.1	2678.9	2473.6	2220.7	1957.7	1811.1
12.5°	2426.9	2553.7	2606.4	2556.1	2362.8	2105.9	1838.0	1691.4
15°	2253.0	2317.1	2369.3	2401.6	2281.8	2065.1	1817.1	1665.9
17.5°	2124.2	2111.9	2155.5	2233.2	2238.0	2119.3	1911.5	1742.5
20°	2062.2	1964.7	1990.0	2098.9	2226.1	2257.0	2099.9	1900.1
22.5°	2058.7	1906.6	1911.5	2028.8	2260.5	2444.7	2335.0	2107.4
25°	2112.3	1900.1	1904.6	2021.4	2321.1	2634.2	2606.8	2341.4
27.5°	2203.8	1928.0	1924.9	2054.2	2402.1	2792.2	2881.1	2627.6
30°	2302.6	1968.2	1960.7	2106.8	2481.6	2889.7	3076.0	2843.5
32.5°	2426.0	2039.8	2013.8	2183.9	2560.2	2983.1	3242.6	3045.3
35°	2543.2	2144.6	2107.4	2294.2	2644.2	3087.0	3428.9	3268.4
37.5°	2662.9	2301.2	2280.3	2453.3	2762.9	3199.7	3642.1	3521.4
40°	2816.6	2523.9	2513.9	2684.4	2921.5	3323.0	3881.2	3784.8
42.5°	2982.1	2760.4	2752.0	2949.8	3118.3	3446.8	4086.0	4010.9
45°	3150.6	3047.2	3049.2	3233.1	3325.6	3563.6	4247.0	4191.8
47.5°	3349.5	3360.9	3432.0	3526.9	3527.3	3693.8	4389.7	4360.3
50°	3601.8	3739.6	3870.7	3885.7	3731.1	3865.8	4564.1	4553.2
52.5°	3887.7	4176.4	4329.1	4281.8	3929.9	4078.9	4822.0	4821.6
55°	4227.1	4633.2	4776.9	4696.3	4168.0	4356.8	5159.0	5137.2
57.5°	4579.0	5072.6	5188.4	5083.5	4465.8	4680.4	5497.1	5381.2
60°	4959.3	5450.8	5568.6	5411.1	4799.8	5003.0	5720.7	5449.9
62.5°	5208.3	5671.9	5756.5	5605.3	5098.9	5331.6	5792.7	5367.8
65°	5221.2	5524.8	5547.2	5493.5	5226.2	5616.8	5688.4	5124.8
67.5°	4866.3	4884.2	4913.5	4971.2	4954.3	5489.6	5285.8	4557.2
70°	4107.4	3868.8	3965.2	4020.8	4146.2	4882.7	4541.8	3706.3
72.5°	3140.6	2792.2	2901.6	2882.7	3143.2	4005.0	3474.7	2854.8
75°	2260.5	1904.1	1912.5	1913.5	2258.5	3196.8	2369.3	2027.3
77.5°	1536.3	1347.3	1375.2	1357.9	1511.4	2504.4	1705.7	1461.3
80°	1050.7	1045.7	1051.7	1010.9	1007.9	1618.7	1262.9	1165.5
82.5°	779.3	720.1	711.8	668.4	772.4	1237.6	958.7	837.5
85°	614.8	398.6	346.5	418.0	669.0	1138.7	584.5	429.4
87.5°	260.5	156.6	94.9	187.9	371.8	834.5	162.0	83.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)