

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: P195768

Luminaire Tested: **NAV-AF-06-D-UNV-SLR-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195768  
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-06-D-UNV-SLR-7050-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 5000K, 1200mA 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: 34901 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 382  
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

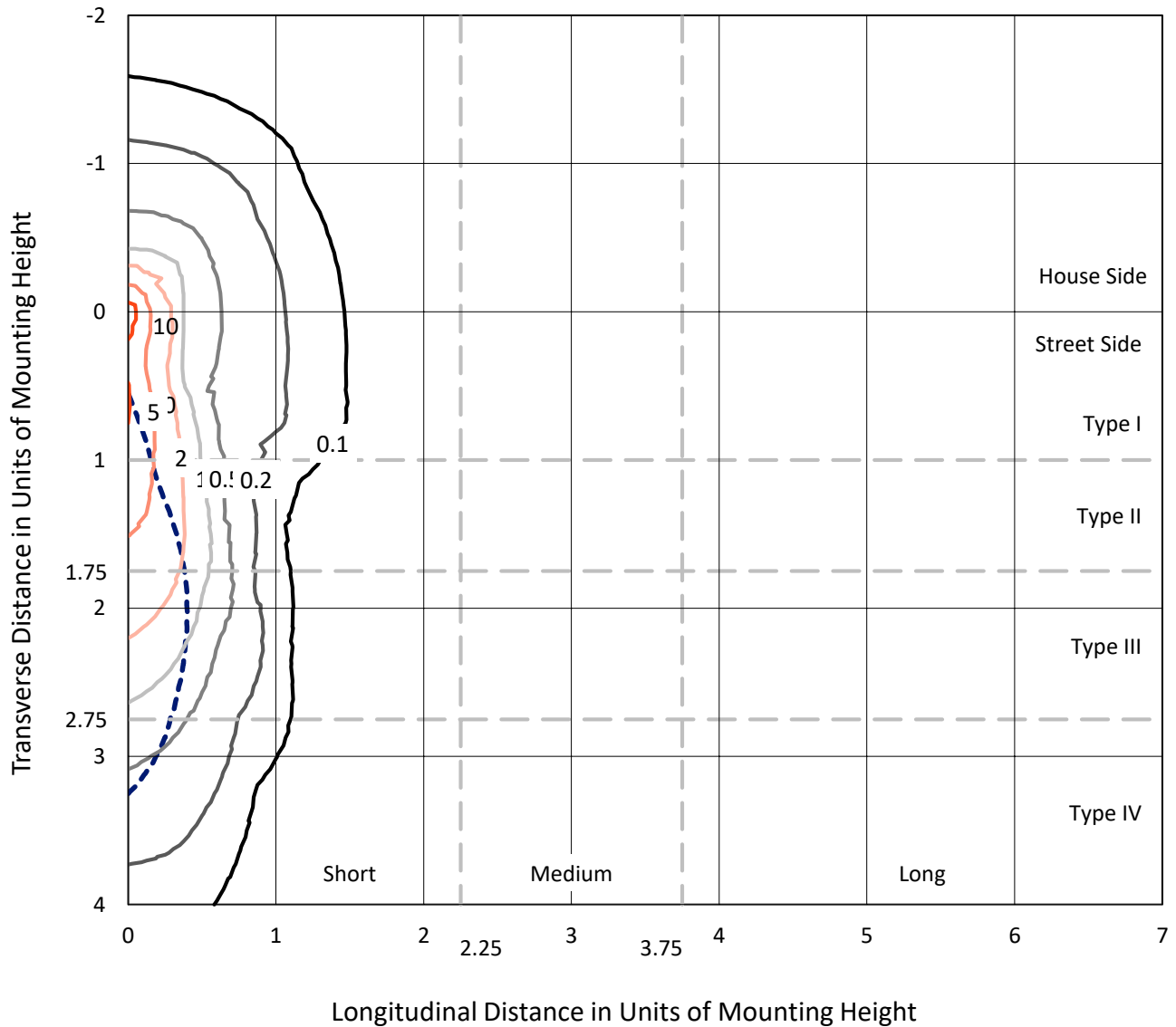


REPORT NUMBER: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

### Iso-Footcandle Lines of Horizontal Illumination

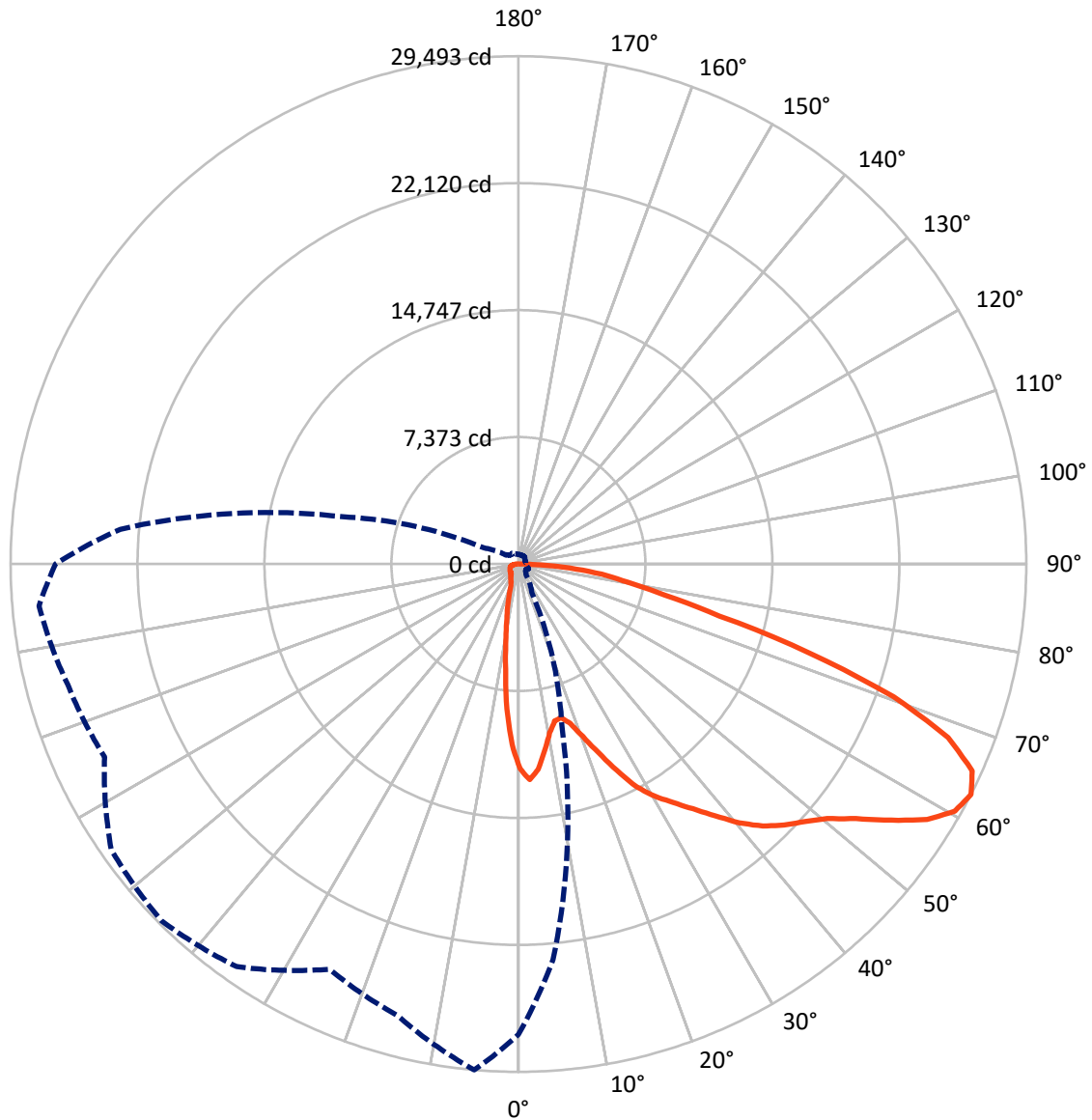
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.2 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P195768  
CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6182.8	0.0	6182.8
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	28718.2	0.0	28718.2
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	34901.0	0.0	34901.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	865.3	2.5
10°-20°	1580.5	4.5
20°-30°	2273.2	6.5
30°-40°	3481.6	10.0
40°-50°	5090.1	14.6
50°-60°	7406.2	21.2
60°-70°	8581.1	24.6
70°-80°	4473.2	12.8
80°-90°	1149.9	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°	34901.0	100.0
0°-180°	34901.0	100.0



REPORT NUMBER: P195768

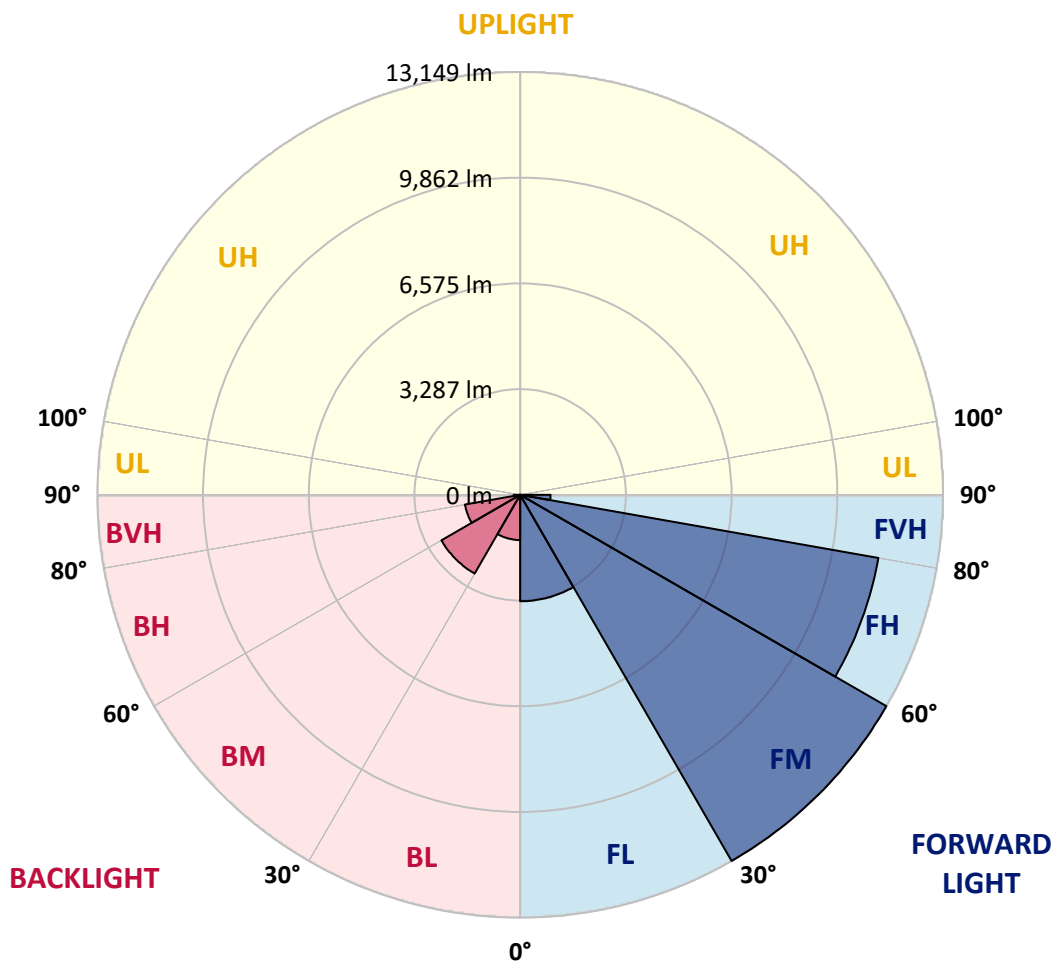
CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3312.3	9.5			
FM	(30°-60°)	13149.1	37.7			
FH	(60°-80°)	11310.9	32.4			G4/12000
FVH	(80°-90°)	946.0	2.7			G5
BL	(0°-30°)	1406.7	4.0	B3/2500		
BM	(30°-60°)	2828.8	8.1	B3/5000		
BH	(60°-80°)	1743.4	5.0	B3/2500		G3/2500
BVH	(80°-90°)	203.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





REPORT NUMBER: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4
2.5°	12283.1	12111.0	11713.7	11364.5	10929.3	10602.8	10205.5	9995.5	9841.1	9737.4	9653.9
5°	11473.3	11058.3	10299.2	9633.6	8915.0	8396.2	7788.9	7457.4	7252.4	7141.1	7090.5
7.5°	10271.3	9722.2	8740.4	7847.1	6948.8	6301.0	5840.4	5349.5	5088.9	4919.3	4863.6
10°	9221.2	8601.2	7429.6	6425.0	5731.6	5271.0	4876.3	4425.9	4091.8	3800.8	3692.0
12.5°	8611.3	7890.1	6554.0	5645.6	5063.5	4570.1	4152.6	3666.7	3315.0	3011.3	2894.9
15°	8482.3	7677.6	6187.1	5149.6	4436.0	3841.3	3340.3	2811.4	2467.2	2216.7	2135.7
17.5°	8872.0	7880.0	6032.7	4696.6	3836.2	3110.0	2492.5	1925.7	1639.8	1503.1	1470.2
20°	9674.1	8325.4	5959.3	4289.2	3254.2	2393.9	1723.3	1308.3	1166.6	1126.1	1123.5
22.5°	10729.4	9049.1	6040.3	3955.2	2707.6	1766.3	1262.7	1075.5	1017.3	994.5	994.5
25°	11921.2	10028.4	6255.4	3699.6	2226.8	1374.1	1088.1	986.9	938.8	916.0	918.6
27.5°	13378.8	11220.3	6549.0	3464.3	1882.7	1204.5	1017.3	931.2	883.1	860.4	862.9
30°	14477.0	12245.1	6802.0	3249.2	1705.6	1136.2	979.3	898.3	845.2	812.3	809.8
32.5°	15504.4	13148.5	7007.0	3094.8	1604.3	1014.7	885.7	824.9	779.4	741.4	733.8
35°	16640.6	13998.8	7103.1	3089.7	1538.5	916.0	809.8	736.4	690.8	647.8	640.2
37.5°	17928.6	15038.8	7184.1	3120.1	1503.1	852.8	774.3	703.5	665.5	622.5	612.4
40°	19269.8	16056.1	7247.4	3145.4	1498.1	809.8	746.5	683.2	645.3	599.7	589.6
42.5°	20421.2	16956.9	7333.4	3135.3	1462.6	802.2	728.8	665.5	630.1	584.5	571.9
45°	21342.3	17673.1	7467.5	3132.8	1409.5	819.9	723.7	660.5	617.4	569.4	559.2
47.5°	22200.1	18480.3	7750.9	3122.6	1351.3	814.8	751.6	655.4	612.4	564.3	556.7
50°	23182.0	19565.9	8234.3	3046.7	1270.3	779.4	802.2	650.3	599.7	556.7	549.1
52.5°	24548.5	21155.0	8950.4	2910.1	1159.0	741.4	809.8	647.8	579.5	541.5	531.4
55°	26155.3	22858.1	9722.2	2712.7	1012.2	675.6	769.3	637.7	559.2	518.8	503.6
57.5°	27397.8	24115.7	10261.2	2429.3	868.0	637.7	685.8	614.9	533.9	493.4	480.8
60°	27747.0	24171.4	10357.4	2090.2	794.6	612.4	589.6	670.6	513.7	470.7	458.0
62.5°	27329.5	23065.6	9729.8	1852.3	769.3	587.1	536.5	640.2	493.4	450.4	437.8
65°	26092.1	21198.1	8325.4	1816.9	794.6	564.3	508.6	511.2	473.2	430.2	417.5
67.5°	23202.2	18449.9	6559.1	1839.7	824.9	541.5	488.4	465.6	450.4	412.5	397.3
70°	18870.0	14854.1	5167.3	1880.2	852.8	511.2	463.1	435.2	422.6	382.1	374.5
72.5°	14535.2	11888.3	4076.6	1852.3	880.6	480.8	427.7	404.9	389.7	351.7	344.1
75°	10321.9	9446.4	2996.1	1589.2	807.2	437.8	387.2	366.9	354.3	313.8	311.3
77.5°	7439.7	7075.3	2085.1	1194.4	637.7	384.6	341.6	323.9	316.3	270.8	270.8
80°	5934.0	5384.9	1247.5	779.4	465.6	318.8	285.9	278.4	270.8	225.2	227.7
82.5°	4263.9	3735.0	797.1	485.9	341.6	242.9	222.7	220.2	207.5	167.0	167.0
85°	2186.4	1908.0	511.2	326.4	240.4	156.9	146.8	141.7	134.1	103.8	103.8
87.5°	425.1	584.5	283.4	159.4	116.4	55.7	55.7	48.1	55.7	38.0	40.5
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: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4
2.5°	9813.3	9762.7	9727.3	9709.6	9965.1	10071.4	10192.9	10367.5	10486.4	10435.8	10597.8
5°	7328.3	7363.8	7444.8	7571.3	7928.1	8097.6	8206.4	8350.7	8454.4	8350.7	8522.7
7.5°	5010.4	5063.5	5235.6	5496.3	5926.4	6116.2	6154.2	6156.7	6134.0	5964.4	6080.8
10°	3689.5	3583.2	3621.2	3808.4	4193.1	4362.6	4380.3	4334.8	4327.2	4258.8	4390.4
12.5°	2859.5	2712.7	2626.7	2657.0	2945.5	3084.7	3107.5	3132.8	3236.5	3269.4	3431.4
15°	2133.2	2057.3	1994.0	1966.2	2156.0	2264.8	2277.5	2338.2	2447.0	2477.4	2616.5
17.5°	1500.6	1520.8	1553.7	1566.4	1703.0	1773.9	1753.6	1753.6	1771.4	1763.8	1842.2
20°	1146.3	1186.8	1250.1	1310.8	1434.8	1475.3	1424.7	1361.4	1320.9	1300.7	1318.4
22.5°	1012.2	1040.0	1080.5	1159.0	1262.7	1283.0	1217.2	1166.6	1128.6	1108.4	1110.9
25°	938.8	966.7	999.6	1062.8	1151.4	1161.5	1100.8	1067.9	1037.5	1017.3	1012.2
27.5°	875.6	893.3	913.5	954.0	1045.1	1050.2	1009.7	989.4	969.2	954.0	948.9
30°	817.4	824.9	832.5	873.0	941.3	948.9	928.7	918.6	911.0	900.9	900.9
32.5°	741.4	751.6	764.2	799.6	865.4	875.6	862.9	855.3	842.7	837.6	830.0
35°	650.3	675.6	703.5	746.5	817.4	822.4	807.2	784.5	754.1	746.5	741.4
37.5°	612.4	617.4	652.9	703.5	776.9	781.9	761.7	723.7	701.0	703.5	708.5
40°	587.1	594.7	614.9	665.5	738.9	746.5	728.8	701.0	678.2	680.7	688.3
42.5°	566.8	577.0	589.6	622.5	695.9	711.1	706.0	680.7	657.9	663.0	673.1
45°	556.7	564.3	564.3	587.1	657.9	680.7	683.2	663.0	645.3	650.3	663.0
47.5°	551.7	551.7	544.1	561.8	632.6	655.4	660.5	650.3	640.2	645.3	657.9
50°	544.1	533.9	526.3	541.5	612.4	632.6	637.7	630.1	635.2	645.3	652.9
52.5°	521.3	511.2	511.2	521.3	592.1	612.4	614.9	609.9	620.0	632.6	645.3
55°	493.4	493.4	496.0	506.1	582.0	597.2	594.7	589.6	599.7	614.9	627.6
57.5°	468.1	465.6	478.3	490.9	569.4	579.5	574.4	574.4	582.0	594.7	607.3
60°	453.0	440.3	450.4	470.7	556.7	566.8	559.2	556.7	569.4	579.5	589.6
62.5°	437.8	425.1	432.7	453.0	539.0	546.6	541.5	541.5	554.2	561.8	571.9
65°	415.0	409.9	415.0	435.2	523.8	526.3	526.3	528.9	539.0	544.1	554.2
67.5°	394.8	394.8	397.3	417.5	511.2	506.1	506.1	518.8	521.3	526.3	536.5
70°	369.5	374.5	374.5	399.8	501.0	483.3	485.9	496.0	501.0	506.1	508.6
72.5°	341.6	344.1	349.2	382.1	485.9	460.6	463.1	470.7	473.2	480.8	483.3
75°	311.3	313.8	321.4	364.4	475.7	437.8	432.7	437.8	442.8	447.9	445.4
77.5°	275.8	280.9	288.5	354.3	442.8	432.7	394.8	399.8	404.9	404.9	402.4
80°	232.8	240.4	253.1	339.1	374.5	417.5	351.7	354.3	356.8	356.8	351.7
82.5°	174.6	189.8	207.5	280.9	293.5	356.8	303.7	308.7	301.1	296.1	293.5
85°	113.9	126.5	151.8	194.8	215.1	280.9	250.5	253.1	237.9	235.3	235.3
87.5°	45.5	48.1	68.3	98.7	129.1	174.6	179.7	184.7	172.1	172.1	177.1
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: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4
2.5°	10843.2	11096.3	11387.3	11683.4	11926.3	12240.1	12543.7	12867.6	13032.1	13128.3	13399.0
5°	8791.0	9137.7	9550.1	10013.2	10397.9	11055.8	11764.3	12553.8	12933.4	13307.9	14016.5
7.5°	6288.3	6627.4	7108.2	7707.9	8254.5	9122.5	10056.2	11124.1	11650.5	12257.8	13419.3
10°	4668.8	5028.1	5463.4	5972.0	6511.0	7414.4	8462.0	9661.5	10241.0	10926.7	12247.7
12.5°	3785.6	4205.7	4656.1	5111.6	5574.7	6182.0	7280.3	8613.8	9236.4	9927.2	11250.6
15°	2953.1	3403.5	3889.4	4385.4	4845.9	5524.1	6645.1	8221.6	8932.7	9600.7	10683.8
17.5°	2090.2	2515.3	3061.9	3664.2	4332.2	5134.4	6508.5	8393.7	9256.6	9955.0	10681.3
20°	1424.7	1718.2	2264.8	2978.4	3803.4	4820.6	6559.1	8998.5	10076.5	10843.2	11119.0
22.5°	1138.7	1277.9	1647.4	2373.6	3347.9	4592.9	6766.6	9828.5	11253.2	12186.9	11916.2
25°	1035.0	1113.4	1305.7	1875.1	2943.0	4441.0	7171.5	10924.2	12571.6	13518.0	12875.2
27.5°	971.7	1040.0	1164.0	1541.1	2593.8	4342.4	7685.2	12214.8	14057.0	14833.8	13874.8
30°	931.2	999.6	1113.4	1384.2	2330.6	4195.6	8135.6	13394.0	15243.8	15747.3	14413.8
32.5°	852.8	905.9	999.6	1239.9	2133.2	4023.5	8525.3	14449.2	16364.8	16531.8	15061.6
35°	771.8	827.5	921.1	1123.5	2016.8	3889.4	8730.3	15385.5	17475.7	17316.3	15704.3
37.5°	741.4	787.0	873.0	1040.0	1953.6	3800.8	8808.7	16306.6	18667.6	18184.2	16152.2
40°	721.2	761.7	837.6	984.4	1935.8	3717.3	8791.0	17182.1	19824.0	19082.6	16504.0
42.5°	706.0	741.4	812.3	946.4	1887.8	3638.9	8732.8	17938.8	20750.2	19856.9	16840.5
45°	693.4	731.3	802.2	966.7	1799.2	3552.8	8697.4	18629.6	21461.2	20509.8	17291.0
47.5°	688.3	731.3	804.7	961.6	1703.0	3456.7	8823.9	19396.3	22081.2	21058.9	17890.7
50°	680.7	728.8	860.4	916.0	1571.4	3337.7	9251.5	20309.9	22731.5	21676.3	18667.6
52.5°	668.1	726.3	918.6	880.6	1401.9	3173.3	9944.9	21600.4	23855.1	22878.3	19816.4
55°	652.9	731.3	878.1	824.9	1222.2	2960.7	10638.3	23369.2	25677.1	24816.7	21466.3
57.5°	635.2	723.7	830.0	774.3	1072.9	2692.5	11164.6	24819.2	27180.2	26815.8	23493.2
60°	622.5	741.4	746.5	744.0	976.8	2436.9	11215.2	24725.6	27612.9	28113.9	25477.1
62.5°	607.3	756.6	680.7	721.2	928.7	2199.0	10590.2	23194.6	26881.6	27946.9	27094.1
65°	587.1	660.5	645.3	701.0	928.7	2072.5	9135.1	20646.4	24859.7	26367.9	27972.2
67.5°	566.8	599.7	620.0	673.1	948.9	1953.6	7341.0	17415.0	21671.3	23819.7	26985.3
70°	539.0	566.8	592.1	647.8	938.8	1870.0	5777.1	13958.3	17835.0	20294.7	24254.9
72.5°	513.7	533.9	559.2	609.9	938.8	1832.1	4641.0	10949.5	13616.7	15689.1	20092.2
75°	475.7	493.4	516.2	571.9	921.1	1675.2	3484.5	8773.3	9962.6	11260.8	15853.6
77.5°	437.8	450.4	468.1	523.8	830.0	1399.4	2464.7	6794.4	7381.5	8100.2	12359.0
80°	389.7	399.8	412.5	468.1	688.3	1085.6	1604.3	5314.1	5519.0	5865.7	8130.5
82.5°	334.0	349.2	351.7	402.4	554.2	787.0	954.0	3641.4	3638.9	4147.5	5736.7
85°	273.3	280.9	285.9	316.3	409.9	523.8	627.6	1989.0	1773.9	2485.0	4982.6
87.5°	205.0	197.4	205.0	212.6	270.8	308.7	336.6	366.9	220.2	450.4	2897.4
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: P195768

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7050-1200

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4	11898.4
2.5°	13543.3	13692.6	13604.0	13497.7	13232.0	12842.3	12543.7	12283.1
5°	14507.4	14783.2	14661.8	14267.0	13578.7	12796.8	11974.4	11473.3
7.5°	14385.9	14932.5	14884.4	14226.5	13239.6	12088.2	10931.8	10271.3
10°	13414.2	14181.0	14312.6	13639.4	12594.3	11306.3	9967.7	9221.2
12.5°	12356.5	13001.7	13270.0	13014.4	12030.0	10721.8	9357.8	8611.3
15°	11470.8	11797.2	12062.9	12227.4	11617.6	10514.3	9251.5	8482.3
17.5°	10815.4	10752.1	10974.8	11369.6	11394.9	10790.1	9732.3	8872.0
20°	10499.1	10003.1	10132.2	10686.3	11334.1	11491.0	10691.4	9674.1
22.5°	10481.4	9707.0	9732.3	10329.5	11508.7	12447.6	11888.3	10729.4
25°	10754.7	9674.1	9696.9	10291.6	11817.5	13411.7	13272.5	11921.2
27.5°	11220.3	9815.8	9800.7	10458.6	12229.9	14216.4	14669.4	13378.8
30°	11723.8	10020.8	9982.9	10726.8	12634.8	14712.4	15661.3	14477.0
32.5°	12351.4	10385.2	10253.6	11119.0	13034.6	15188.1	16509.0	15504.4
35°	12948.6	10919.1	10729.4	11680.8	13462.3	15717.0	17458.0	16640.6
37.5°	13558.5	11716.2	11610.0	12490.6	14067.1	16291.4	18543.6	17928.6
40°	14340.4	12849.9	12799.3	13667.3	14874.3	16919.0	19760.7	19269.8
42.5°	15183.0	14054.4	14011.4	15018.6	15876.4	17549.1	20803.3	20421.2
45°	16040.9	15514.5	15524.7	16461.0	16931.6	18143.7	21623.2	21342.3
47.5°	17053.1	17111.3	17473.2	17956.5	17959.0	18806.7	22349.4	22200.1
50°	18338.6	19039.5	19707.6	19783.5	18996.5	19682.3	23237.7	23182.0
52.5°	19793.6	21263.9	22040.7	21800.3	20008.7	20767.9	24551.0	24548.5
55°	21522.0	23589.4	24320.7	23910.8	21220.8	22182.4	26266.7	26155.3
57.5°	23313.6	25826.4	26416.0	25882.0	22736.6	23829.8	27987.4	27397.8
60°	25249.4	27752.1	28351.8	27549.6	24437.1	25472.1	29126.1	27747.0
62.5°	26517.2	28878.2	29308.3	28539.1	25960.5	27144.8	29493.1	27329.5
65°	26583.0	28129.1	28243.0	27969.7	26608.3	28597.3	28961.7	26092.1
67.5°	24776.2	24867.3	25016.6	25310.1	25224.1	27949.5	26911.9	23202.2
70°	20912.1	19697.5	20188.4	20471.8	21109.5	24859.7	23123.8	18870.0
72.5°	15990.3	14216.4	14773.1	14676.9	16002.9	20390.8	17690.8	14535.2
75°	11508.7	9694.4	9737.4	9742.5	11498.6	16276.2	12062.9	10321.9
77.5°	7821.8	6860.2	7001.9	6913.3	7695.3	12751.2	8684.7	7439.7
80°	5349.5	5324.2	5354.6	5147.1	5131.9	8241.9	6430.0	5934.0
82.5°	3967.8	3666.7	3623.7	3403.5	3932.4	6301.0	4881.3	4263.9
85°	3130.2	2029.5	1763.8	2128.2	3406.1	5797.4	2975.9	2186.4
87.5°	1326.0	797.1	483.3	956.5	1892.8	4248.7	824.9	425.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)