

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: P270693

Luminaire Tested: **NAV-AF-06-D-UNV-SLR-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P270693  
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-7027  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 2700K, 1050mA 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: 27641.4 lumens  
Efficiency: N/A  
Efficacy: 83.0 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 - G4

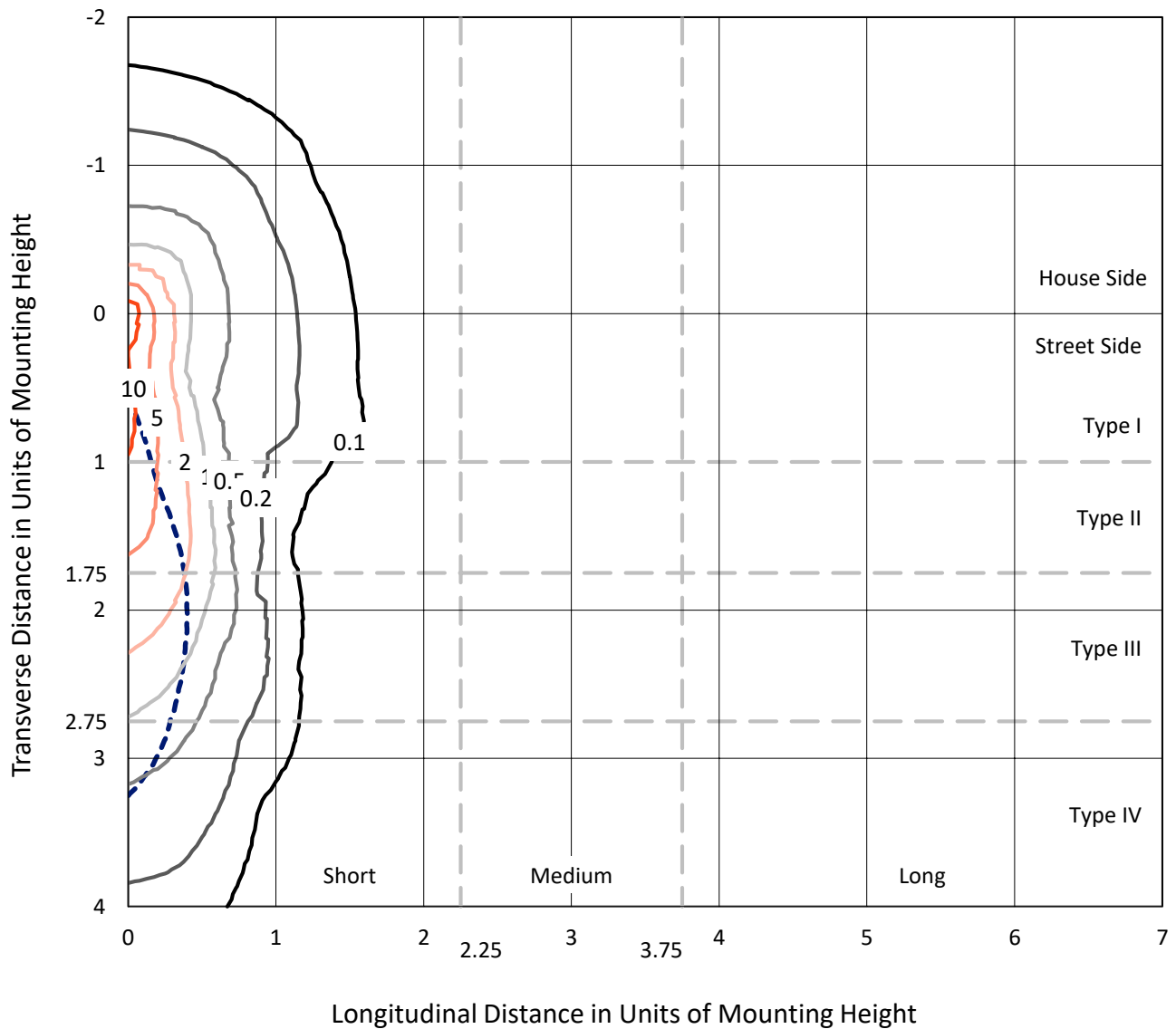
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P270693  
 CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

### Iso-Footcandle Lines of Horizontal Illumination

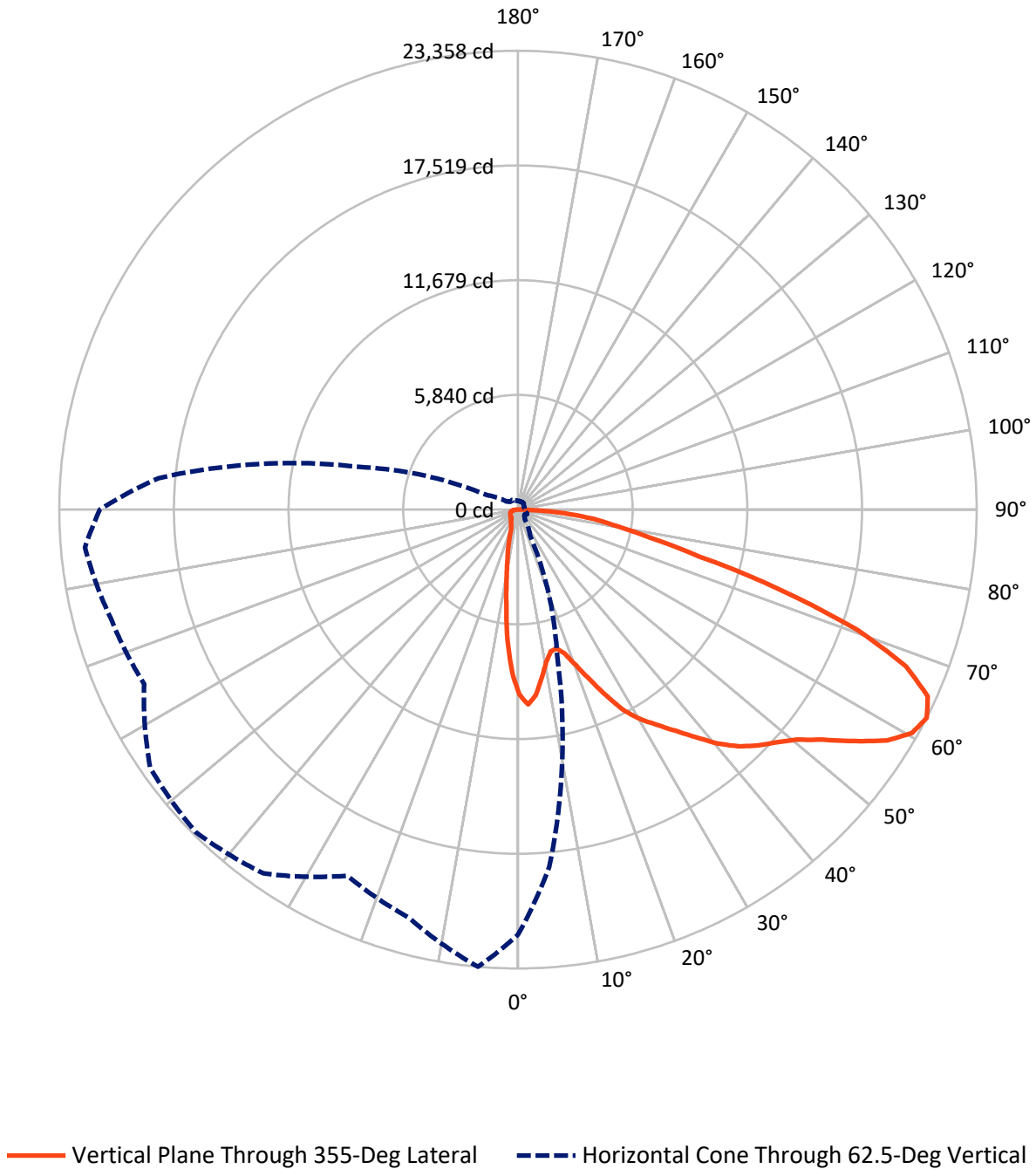
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P270693  
CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

### Luminous Intensity Polar Plot



REPORT NUMBER: P270693

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4896.7	0.0	4896.7
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	22744.7	0.0	22744.7
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	27641.4	0.0	27641.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	685.3	2.5
10°-20°	1251.7	4.5
20°-30°	1800.3	6.5
30°-40°	2757.4	10.0
40°-50°	4031.4	14.6
50°-60°	5865.7	21.2
60°-70°	6796.2	24.6
70°-80°	3542.7	12.8
80°-90°	910.7	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°	27641.4	100.0
0°-180°	27641.4	100.0



REPORT NUMBER: P270693

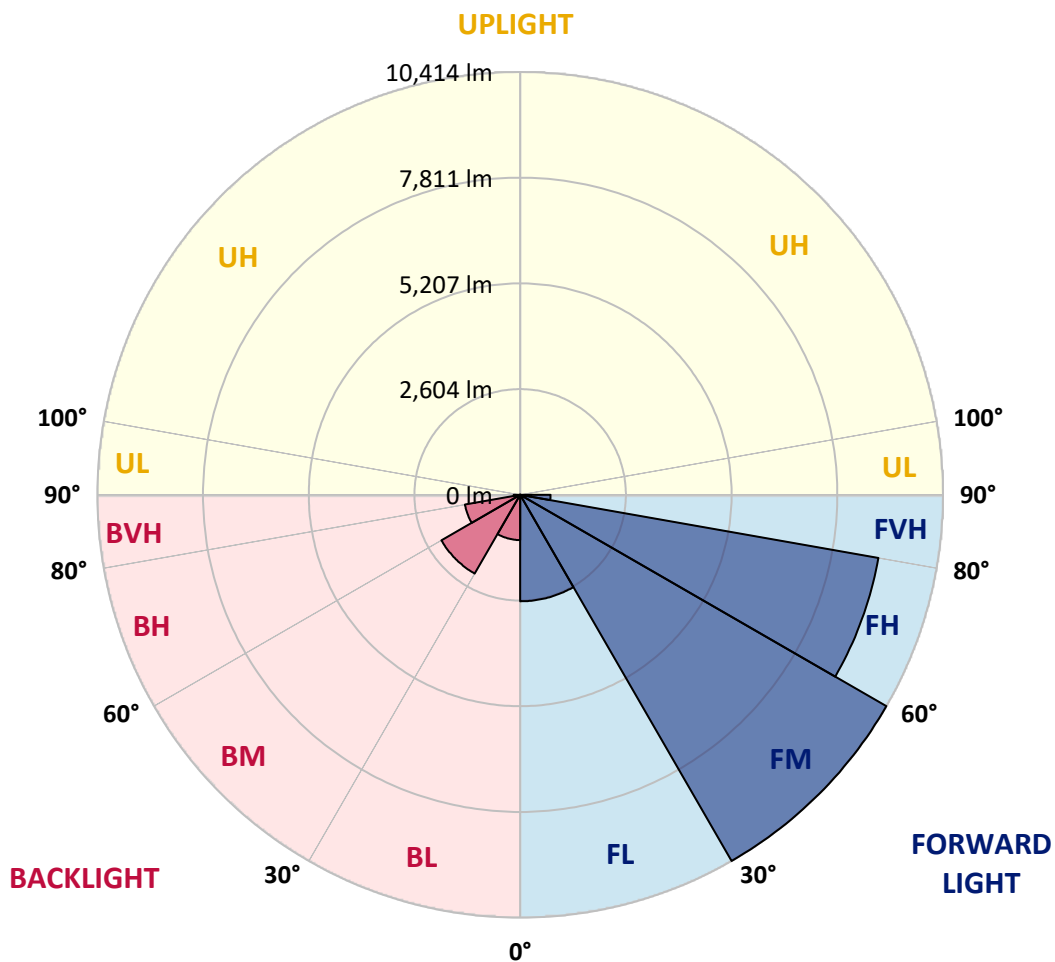
CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2623.3	9.5			
FM	(30°-60°)	10414.0	37.7			
FH	(60°-80°)	8958.2	32.4			G4/12000
FVH	(80°-90°)	749.2	2.7			G4/750
BL	(0°-30°)	1114.1	4.0	B3/2500		
BM	(30°-60°)	2240.4	8.1	B2/2500		
BH	(60°-80°)	1380.7	5.0	B3/2500		G3/2500
BVH	(80°-90°)	161.5	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-G4**

Type IV Short





REPORT NUMBER: P270693

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5
2.5°	9728.1	9591.9	9277.2	9000.7	8656.0	8397.4	8082.8	7916.5	7794.1	7711.9	7645.8
5°	9086.9	8758.1	8156.9	7629.8	7060.6	6649.8	6168.8	5906.3	5743.9	5655.6	5615.7
7.5°	8134.8	7699.9	6922.3	6214.8	5503.3	4990.4	4625.6	4236.8	4030.3	3896.0	3852.0
10°	7303.1	6812.0	5884.2	5088.5	4539.4	4174.7	3862.1	3505.2	3240.7	3010.2	2924.1
12.5°	6820.1	6249.0	5190.8	4471.3	4010.4	3619.5	3288.9	2904.0	2625.4	2384.9	2292.7
15°	6718.0	6080.5	4900.2	4078.5	3513.4	3042.3	2645.5	2226.5	1954.1	1755.6	1691.5
17.5°	7026.5	6241.0	4777.8	3719.7	3038.2	2463.2	1974.0	1525.1	1298.7	1190.4	1164.5
20°	7661.9	6593.6	4719.8	3397.0	2577.3	1896.0	1364.9	1036.1	923.8	891.8	889.9
22.5°	8497.5	7166.9	4784.0	3132.5	2144.4	1398.9	1000.1	851.8	805.7	787.6	787.6
25°	9441.5	7942.5	4954.2	2930.1	1763.6	1088.2	861.7	781.6	743.5	725.6	727.4
27.5°	10596.0	8886.5	5186.8	2743.8	1491.0	954.0	805.7	737.5	699.4	681.5	683.4
30°	11465.7	9698.1	5387.1	2573.4	1350.8	899.8	775.5	711.5	669.3	643.4	641.3
32.5°	12279.4	10413.6	5549.5	2451.0	1270.7	803.7	701.4	653.3	617.2	587.2	581.3
35°	13179.4	11087.1	5625.6	2447.1	1218.6	725.6	641.3	583.2	547.2	513.0	507.1
37.5°	14199.4	11910.6	5689.8	2471.1	1190.4	675.3	613.3	557.2	527.0	493.0	485.1
40°	15261.7	12716.3	5739.9	2491.2	1186.4	641.3	591.3	541.0	511.0	474.9	466.9
42.5°	16173.5	13429.8	5808.0	2483.2	1158.5	635.3	577.3	527.0	499.0	462.9	452.9
45°	16903.0	13997.0	5914.3	2481.2	1116.4	649.4	573.2	523.2	488.9	450.9	443.0
47.5°	17582.4	14636.4	6138.7	2473.2	1070.2	645.3	595.2	519.1	485.1	446.9	440.9
50°	18360.1	15496.1	6521.5	2412.9	1006.1	617.2	635.3	515.1	474.9	440.9	434.9
52.5°	19442.2	16754.6	7088.6	2304.8	917.9	587.2	641.3	513.0	458.9	428.9	420.9
55°	20714.9	18103.5	7699.9	2148.4	801.6	535.1	609.3	505.0	443.0	410.9	398.8
57.5°	21699.0	19099.6	8126.8	1924.0	687.5	505.0	543.1	487.1	422.9	390.9	380.8
60°	21975.5	19143.7	8203.1	1655.4	629.4	485.1	466.9	531.1	406.8	372.7	362.7
62.5°	21644.8	18267.8	7706.0	1467.0	609.3	465.0	424.9	507.1	390.9	356.7	346.7
65°	20664.8	16788.9	6593.6	1438.9	629.4	446.9	402.8	404.9	374.8	340.6	330.7
67.5°	18376.1	14612.3	5194.8	1457.1	653.3	428.9	386.8	368.8	356.7	326.7	314.6
70°	14944.9	11764.4	4092.5	1489.1	675.3	404.9	366.8	344.7	334.7	302.5	296.6
72.5°	11511.9	9415.6	3228.7	1467.0	697.4	380.8	338.8	320.6	308.7	278.6	272.5
75°	8174.9	7481.5	2373.0	1258.6	639.4	346.7	306.6	290.6	280.6	248.6	246.6
77.5°	5892.3	5603.5	1651.4	945.9	505.0	304.6	270.6	256.6	250.4	214.4	214.4
80°	4699.8	4264.9	988.0	617.2	368.8	252.6	226.5	220.4	214.4	178.4	180.4
82.5°	3377.0	2958.1	631.2	384.8	270.6	192.3	176.3	174.5	164.3	132.3	132.3
85°	1731.7	1511.0	404.9	258.5	190.4	124.2	116.2	112.3	106.2	82.1	82.1
87.5°	336.8	462.9	224.4	126.2	92.2	44.0	44.0	38.1	44.0	30.1	32.1
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: P270693

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5
2.5°	7772.0	7732.0	7704.0	7689.9	7892.4	7976.5	8072.7	8211.0	8305.2	8265.1	8393.5
5°	5803.9	5832.1	5896.2	5996.5	6279.1	6413.3	6499.4	6613.7	6695.8	6613.7	6750.0
7.5°	3968.3	4010.4	4146.5	4353.0	4693.7	4844.0	4874.2	4876.1	4858.0	4723.7	4816.0
10°	2922.0	2837.8	2868.0	3016.2	3320.9	3455.2	3469.2	3433.1	3427.2	3373.0	3477.2
12.5°	2264.6	2148.4	2080.4	2104.4	2332.8	2443.1	2461.0	2481.2	2563.4	2589.4	2717.6
15°	1689.5	1629.3	1579.3	1557.2	1707.6	1793.7	1803.7	1851.9	1938.1	1962.1	2072.3
17.5°	1188.5	1204.4	1230.6	1240.6	1348.7	1404.9	1388.9	1388.9	1403.0	1397.0	1459.0
20°	907.8	939.9	990.0	1038.1	1136.4	1168.4	1128.4	1078.2	1046.2	1030.1	1044.2
22.5°	801.6	823.7	855.7	917.9	1000.1	1016.2	964.1	923.8	893.9	877.9	879.8
25°	743.5	765.5	791.6	841.7	911.9	920.0	871.9	845.8	821.7	805.7	801.6
27.5°	693.4	707.4	723.5	755.6	827.7	831.7	799.6	783.6	767.6	755.6	751.5
30°	647.4	653.3	659.4	691.4	745.6	751.5	735.5	727.4	721.5	713.4	713.4
32.5°	587.2	595.2	605.3	633.3	685.4	693.4	683.4	677.4	667.4	663.4	657.4
35°	515.1	535.1	557.2	591.3	647.4	651.4	639.4	621.3	597.3	591.3	587.2
37.5°	485.1	488.9	517.1	557.2	615.2	619.3	603.2	573.2	555.2	557.2	561.3
40°	465.0	471.0	487.1	527.0	585.2	591.3	577.3	555.2	537.0	539.2	545.1
42.5°	449.0	457.0	466.9	493.0	551.1	563.1	559.1	539.2	521.0	525.1	533.1
45°	440.9	446.9	446.9	465.0	521.0	539.2	541.0	525.1	511.0	515.1	525.1
47.5°	436.8	436.8	430.8	444.9	501.1	519.1	523.2	515.1	507.1	511.0	521.0
50°	430.8	422.9	416.9	428.9	485.1	501.1	505.0	499.0	503.1	511.0	517.1
52.5°	412.9	404.9	404.9	412.9	468.9	485.1	487.1	483.0	491.1	501.1	511.0
55°	390.9	390.9	392.7	400.9	461.0	473.0	471.0	466.9	474.9	487.1	497.0
57.5°	370.8	368.8	378.7	388.7	450.9	458.9	454.9	454.9	461.0	471.0	481.0
60°	358.8	348.7	356.7	372.7	440.9	449.0	443.0	440.9	450.9	458.9	466.9
62.5°	346.7	336.8	342.8	358.8	426.9	433.0	428.9	428.9	438.9	444.9	452.9
65°	328.7	324.6	328.7	344.7	414.8	416.9	416.9	418.9	426.9	430.8	438.9
67.5°	312.6	312.6	314.6	330.7	404.9	400.9	400.9	410.9	412.9	416.9	424.9
70°	292.6	296.6	296.6	316.7	396.8	382.8	384.8	392.7	396.8	400.9	402.8
72.5°	270.6	272.5	276.6	302.5	384.8	364.7	366.8	372.7	374.8	380.8	382.8
75°	246.6	248.6	254.5	288.5	376.7	346.7	342.8	346.7	350.7	354.7	352.8
77.5°	218.5	222.5	228.4	280.6	350.7	342.8	312.6	316.7	320.6	320.6	318.7
80°	184.4	190.4	200.4	268.6	296.6	330.7	278.6	280.6	282.5	282.5	278.6
82.5°	138.2	150.2	164.3	222.5	232.5	282.5	240.4	244.5	238.5	234.5	232.5
85°	90.2	100.3	120.3	154.2	170.4	222.5	198.4	200.4	188.4	186.4	186.4
87.5°	36.1	38.1	54.1	78.2	102.1	138.2	142.3	146.3	136.4	136.4	140.2
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: P270693

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5
2.5°	8587.7	8788.2	9018.8	9253.3	9445.6	9694.1	9934.5	10191.1	10321.3	10397.5	10611.9
5°	6962.5	7236.9	7563.6	7930.4	8235.0	8756.1	9317.3	9942.6	10243.3	10539.9	11101.1
7.5°	4980.4	5248.8	5629.7	6104.6	6537.5	7225.0	7964.6	8810.2	9227.1	9708.2	10627.9
10°	3697.7	3982.2	4327.0	4729.8	5156.7	5872.2	6701.9	7651.9	8110.7	8653.9	9700.1
12.5°	2998.3	3330.8	3687.6	4048.4	4415.2	4896.1	5766.0	6822.2	7315.2	7862.2	8910.5
15°	2338.8	2695.5	3080.4	3473.1	3838.0	4375.0	5262.9	6511.5	7074.6	7603.8	8461.6
17.5°	1655.4	1992.1	2425.1	2902.1	3431.0	4066.4	5154.7	6647.7	7331.2	7884.3	8459.5
20°	1128.4	1360.8	1793.7	2358.9	3012.2	3817.8	5194.8	7126.8	7980.5	8587.7	8806.3
22.5°	901.9	1012.1	1304.7	1880.0	2651.4	3637.5	5359.1	7784.2	8912.4	9652.0	9437.6
25°	819.8	881.9	1034.2	1485.1	2330.8	3517.4	5679.8	8651.9	9956.6	10706.2	10197.1
27.5°	769.6	823.7	921.9	1220.5	2054.2	3439.2	6086.6	9674.0	11133.1	11748.4	10988.7
30°	737.5	791.6	881.9	1096.3	1845.8	3322.9	6443.4	10607.9	12073.0	12471.9	11415.7
32.5°	675.3	717.4	791.6	982.0	1689.5	3186.6	6752.0	11443.7	12960.8	13093.2	11928.8
35°	611.2	655.4	729.6	889.9	1597.2	3080.4	6914.3	12185.2	13840.6	13714.5	12437.8
37.5°	587.2	623.3	691.4	823.7	1547.2	3010.2	6976.4	12914.8	14784.7	14401.8	12792.6
40°	571.2	603.2	663.4	779.5	1533.1	2944.0	6962.5	13608.2	15700.5	15113.4	13071.1
42.5°	559.1	587.2	643.4	749.5	1495.0	2881.9	6916.3	14207.5	16434.0	15726.5	13337.7
45°	549.1	579.1	635.3	765.5	1424.9	2813.9	6888.3	14754.7	16997.2	16243.6	13694.4
47.5°	545.1	579.1	637.3	761.6	1348.7	2737.7	6988.5	15361.8	17488.3	16678.6	14169.3
50°	539.2	577.3	681.5	725.6	1244.6	2643.5	7327.1	16085.3	18003.3	17167.6	14784.7
52.5°	529.1	575.2	727.4	697.4	1110.2	2513.2	7876.2	17107.4	18893.2	18119.5	15694.5
55°	517.1	579.1	695.5	653.3	968.1	2344.8	8425.5	18508.4	20336.1	19654.7	17001.2
57.5°	503.1	573.2	657.4	613.3	849.7	2132.4	8842.3	19656.7	21526.7	21238.0	18606.6
60°	493.0	587.2	591.3	589.2	773.6	1930.0	8882.4	19582.6	21869.2	22266.2	20177.8
62.5°	481.0	599.2	539.2	571.2	735.5	1741.6	8387.4	18370.1	21290.1	22133.9	21458.4
65°	465.0	523.2	511.0	555.2	735.5	1641.5	7234.9	16351.8	19688.8	20883.3	22153.9
67.5°	449.0	474.9	491.1	533.1	751.5	1547.2	5814.0	13792.5	17163.6	18865.0	21372.3
70°	426.9	449.0	468.9	513.0	743.5	1481.0	4575.4	11054.9	14125.3	16073.4	19209.8
72.5°	406.8	422.9	443.0	483.0	743.5	1451.0	3675.7	8672.0	10784.3	12425.7	15912.9
75°	376.7	390.9	408.9	452.9	729.6	1326.7	2759.8	6948.4	7890.4	8918.6	12556.0
77.5°	346.7	356.7	370.8	414.8	657.4	1108.2	1952.0	5381.1	5846.1	6415.2	9788.3
80°	308.7	316.7	326.7	370.8	545.1	859.8	1270.7	4208.6	4371.1	4645.7	6439.3
82.5°	264.6	276.6	278.6	318.7	438.9	623.3	755.6	2884.0	2881.9	3284.8	4543.4
85°	216.4	222.5	226.5	250.4	324.6	414.8	497.0	1575.3	1404.9	1968.0	3946.2
87.5°	162.4	156.3	162.4	168.3	214.4	244.5	266.5	290.6	174.5	356.7	2294.8
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: P270693

CATALOG NUMBER: NAV-AF-06-D-UNV-SLR-7027

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5	9423.5
2.5°	10726.2	10844.5	10774.4	10690.2	10479.6	10171.1	9934.5	9728.1
5°	11489.9	11708.2	11612.1	11299.4	10754.2	10134.9	9483.6	9086.9
7.5°	11393.7	11826.5	11788.4	11267.4	10485.7	9573.9	8658.0	8134.8
10°	10624.1	11231.2	11335.5	10802.4	9974.7	8954.6	7894.3	7303.1
12.5°	9786.2	10297.4	10509.8	10307.3	9527.8	8491.6	7411.3	6820.1
15°	9084.7	9343.4	9553.8	9684.1	9201.1	8327.3	7327.1	6718.0
17.5°	8565.8	8515.7	8692.0	9004.7	9024.7	8545.7	7707.9	7026.5
20°	8315.3	7922.4	8024.6	8463.6	8976.7	9100.9	8467.6	7661.9
22.5°	8301.1	7688.0	7707.9	8181.0	9114.9	9858.4	9415.6	8497.5
25°	8517.6	7661.9	7679.9	8151.0	9359.4	10622.0	10511.7	9441.5
27.5°	8886.5	7774.1	7762.1	8283.1	9686.1	11259.4	11618.0	10596.0
30°	9285.2	7936.4	7906.4	8495.6	10006.7	11652.2	12403.6	11465.7
32.5°	9782.3	8225.1	8120.8	8806.3	10323.4	12028.9	13075.1	12279.4
35°	10255.2	8648.0	8497.5	9251.1	10662.2	12447.9	13826.6	13179.4
37.5°	10738.2	9279.2	9195.1	9892.5	11141.0	12902.7	14686.4	14199.4
40°	11357.5	10177.1	10137.1	10824.4	11780.5	13399.7	15650.5	15261.7
42.5°	12024.9	11131.1	11097.0	11894.6	12574.0	13898.8	16476.2	16173.5
45°	12704.3	12287.5	12295.6	13037.0	13409.8	14369.7	17125.5	16903.0
47.5°	13505.9	13552.1	13838.7	14221.4	14223.5	14894.8	17700.7	17582.4
50°	14524.1	15079.3	15608.3	15668.4	15045.2	15588.3	18404.1	18360.1
52.5°	15676.5	16840.9	17456.1	17265.8	15846.8	16448.1	19444.4	19442.2
55°	17045.2	18682.7	19261.8	18937.2	16806.7	17568.4	20803.0	20714.9
57.5°	18464.2	20454.3	20921.3	20498.5	18007.3	18873.1	22165.9	21699.0
60°	19997.3	21979.5	22454.6	21819.2	19354.2	20173.7	23067.8	21975.5
62.5°	21001.6	22871.3	23212.2	22602.9	20560.5	21498.5	23358.4	21644.8
65°	21053.7	22278.1	22368.3	22151.9	21073.7	22649.0	22937.5	20664.8
67.5°	19622.7	19694.8	19813.0	20045.6	19977.3	22135.9	21314.2	18376.1
70°	16562.3	15600.3	15989.1	16213.6	16718.6	19688.8	18313.9	14944.9
72.5°	12664.2	11259.4	11700.2	11624.1	12674.2	16149.5	14011.0	11511.9
75°	9114.9	7678.0	7711.9	7716.0	9106.8	12890.7	9553.8	8174.9
77.5°	6194.8	5433.3	5545.4	5475.3	6094.6	10098.9	6878.2	5892.3
80°	4236.8	4216.7	4240.8	4076.5	4064.4	6527.5	5092.5	4699.8
82.5°	3142.5	2904.0	2869.9	2695.5	3114.5	4990.4	3866.0	3377.0
85°	2479.1	1607.3	1397.0	1685.5	2697.6	4591.4	2357.0	1731.7
87.5°	1050.2	631.2	382.8	757.6	1499.1	3365.1	653.3	336.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)