

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: P196482

Luminaire Tested: **NAV-AF-06-D-UNV-AFL-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)  
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-AFL-7030-HSS  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29242.1 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

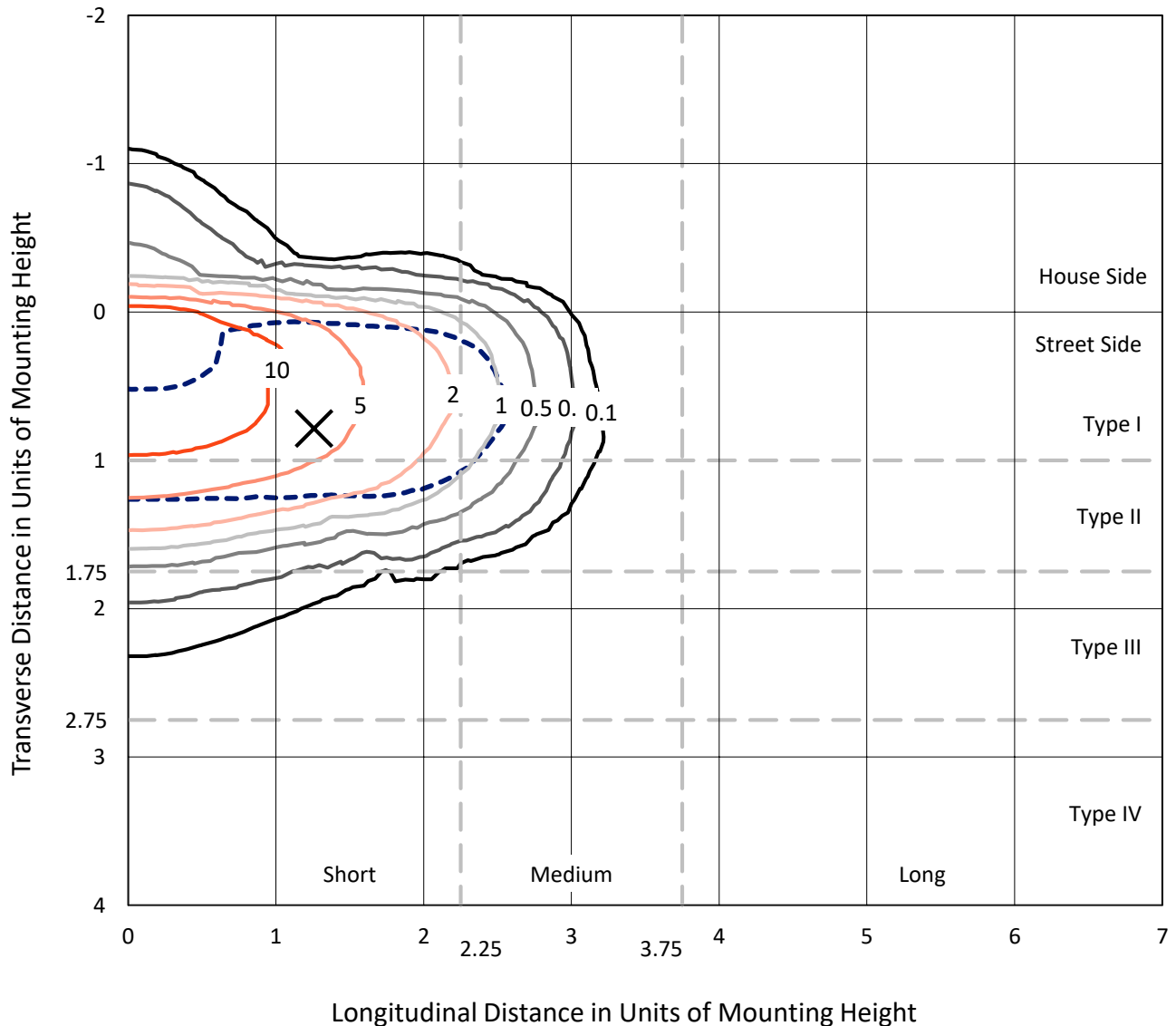
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P196482  
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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

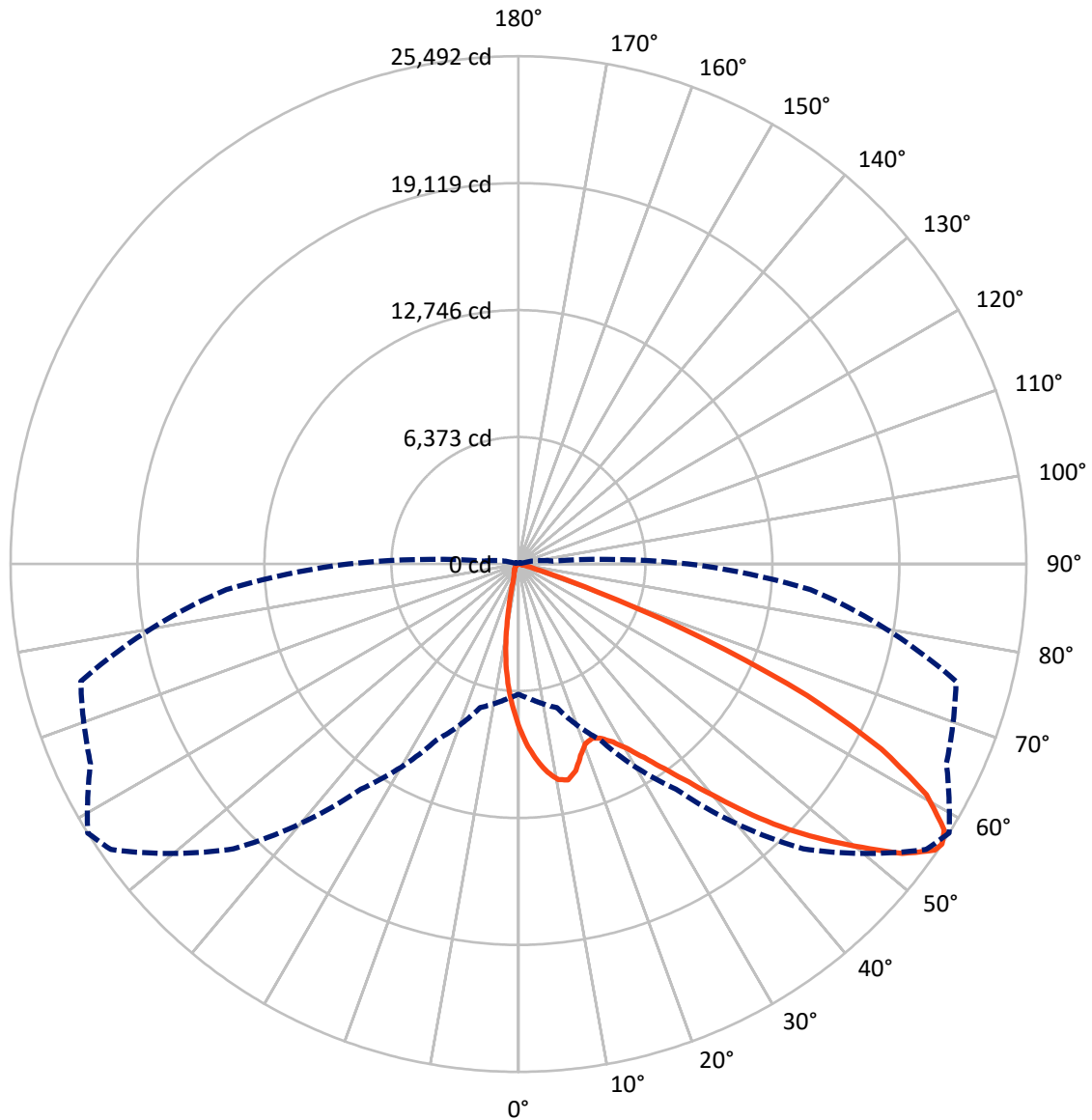


Based on 25 foot mounting height. Maximum calculated value = 16.5 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P196482

CATALOG NUMBER: NAV-AF-06-D-UNV-AFL-7030-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

REPORT NUMBER: P196482

CATALOG NUMBER: NAV-AF-06-D-UNV-AFL-7030-HSS

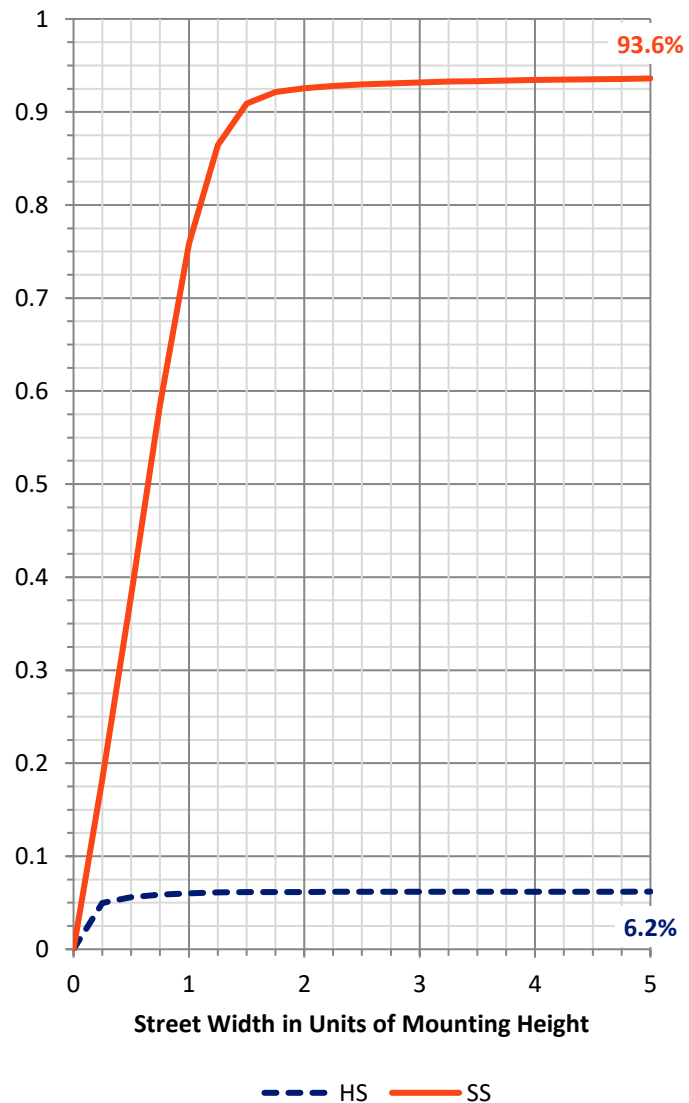
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1825.3	0.0	1825.3
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	27416.8	0.0	27416.8
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	29242.1	0.0	29242.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	706.3	2.4
10°-20°	1643.4	5.6
20°-30°	2765.3	9.5
30°-40°	4735.3	16.2
40°-50°	7145.6	24.4
50°-60°	7427.6	25.4
60°-70°	4169.8	14.3
70°-80°	571.5	2.0
80°-90°	77.4	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°	29242.1	100.0
0°-180°	29242.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P196482

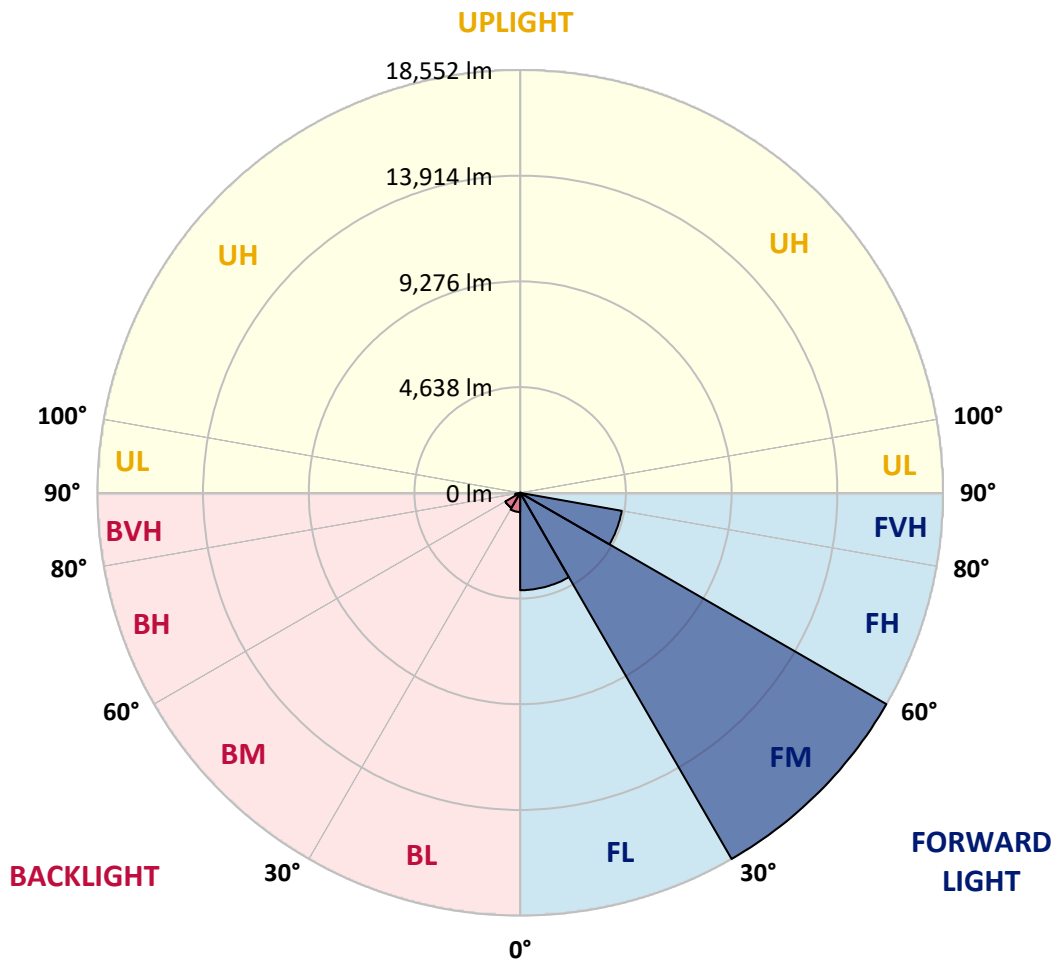
CATALOG NUMBER: NAV-AF-06-D-UNV-AFL-7030-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4272.9	14.6			
FM	(30°-60°)	18552.4	63.4			
FH	(60°-80°)	4524.7	15.5			G2/5000
FVH	(80°-90°)	66.7	0.2			G1/100
BL	(0°-30°)	842.0	2.9	B2/1000		
BM	(30°-60°)	756.1	2.6	B1/1000		
BH	(60°-80°)	216.5	0.7	B1/500		G1/500
BVH	(80°-90°)	10.7	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P196482

CATALOG NUMBER: NAV-AF-06-D-UNV-AFL-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3
2.5°	9961.5	9901.3	9838.8	9722.8	9615.7	9450.6	9223.0	9167.3	8988.8	8694.3	8419.8
5°	10820.5	10809.3	10767.0	10673.2	10557.1	10356.4	10099.8	9928.1	9651.4	9187.4	8658.6
7.5°	10311.8	10405.6	10559.5	10778.1	10925.4	10905.2	10708.9	10559.5	10285.0	9651.4	8892.8
10°	8692.1	8709.9	8921.9	9381.4	10108.7	10787.0	11043.6	11003.4	10751.3	10057.5	9098.1
12.5°	8120.9	8132.0	8181.3	8328.4	8801.4	9747.3	10909.7	11119.5	11099.3	10445.6	9316.7
15°	8165.6	8172.3	8185.6	8232.4	8366.3	8841.6	10231.5	10764.7	11322.4	10813.8	9530.9
17.5°	8518.1	8513.6	8471.2	8426.6	8469.0	8625.2	9539.9	10102.1	11275.5	11123.9	9707.1
20°	9205.2	9227.5	9084.7	8886.2	8783.6	8790.2	9198.5	9620.2	11012.4	11364.8	9838.8
22.5°	10171.3	10186.9	9952.7	9609.1	9307.8	9156.2	9269.9	9493.0	10708.9	11587.9	9945.9
25°	11324.7	11324.7	10996.7	10508.1	10041.8	9709.5	9611.2	9696.0	10592.9	11840.1	10053.1
27.5°	12569.6	12614.2	12185.9	11545.5	10929.8	10443.4	10135.6	10119.9	10682.2	12156.8	10173.4
30°	13923.8	13964.0	13455.3	12672.2	11942.7	11320.3	10847.3	10744.7	11023.5	12583.0	10349.7
32.5°	15271.3	15304.8	14742.6	13943.8	13093.8	12362.1	11739.7	11576.8	11636.9	13205.4	10608.5
35°	16984.8	16991.5	16279.8	15329.4	14421.3	13562.4	12774.8	12614.2	12547.4	13990.7	10981.1
37.5°	18347.9	18294.4	17843.7	16944.7	15902.8	15005.8	14080.0	13870.3	13709.7	15095.1	11559.0
40°	18669.2	18669.2	18602.3	18332.4	17504.7	16641.2	15744.4	15432.0	15077.2	16395.8	12335.4
42.5°	17832.6	17886.2	18327.9	18914.6	18921.3	18368.0	17491.2	17228.0	16603.2	17877.2	13183.1
45°	15960.8	15976.3	17036.1	18620.2	19695.5	20012.3	19365.3	19001.6	18136.1	19416.6	13959.5
47.5°	15287.0	15336.0	15786.8	17723.3	19753.5	21344.3	21163.5	20663.7	19554.9	20822.2	14684.7
50°	14251.8	14312.0	14863.1	16402.5	19231.5	22198.8	22883.6	22348.2	20846.6	21993.5	15043.8
52.5°	11775.3	11869.1	12647.7	14655.6	17926.2	22234.4	24458.8	24137.4	22169.7	22620.4	15001.4
55°	8103.1	8172.3	9080.3	11440.6	15293.7	21143.5	25137.0	25357.9	23349.9	22760.9	14796.2
56°	6536.9	6795.7	7460.6	9747.3	13794.4	20215.3	24980.8	25491.8	23700.2	22738.6	14707.0
57.5°	4321.5	4370.6	5095.7	7063.4	11077.0	18200.7	24275.8	25206.1	24150.8	22624.9	14642.3
60°	2032.4	2054.7	2315.9	3259.5	5994.7	13263.4	21984.5	23528.4	24315.9	22386.1	14639.9
62.5°	1325.2	1329.6	1361.0	1555.0	2451.9	7224.1	18225.2	20447.4	22948.4	22359.4	14597.6
65°	1091.0	1102.1	1064.1	1088.8	1282.8	2724.1	12855.1	15940.7	19737.9	21730.1	14120.1
67.5°	961.6	963.7	912.6	883.5	939.3	1195.9	6476.7	10055.2	14762.7	18463.9	11630.3
70°	876.8	874.5	816.6	749.6	751.8	794.2	2110.6	4176.4	8167.7	10963.3	6677.5
72.5°	778.6	783.1	749.6	655.9	624.6	562.2	794.2	1126.7	2779.9	3520.6	1760.2
75°	682.7	673.8	640.3	580.0	522.0	377.1	399.4	479.6	725.1	718.4	379.2
77.5°	517.6	508.7	524.3	495.3	408.3	263.4	218.6	249.8	328.0	305.6	153.9
80°	394.9	390.4	356.9	423.9	372.6	198.6	149.4	153.9	178.5	162.9	75.8
82.5°	285.6	283.3	270.0	261.0	236.4	145.0	113.7	120.5	133.9	113.7	55.7
85°	109.4	109.4	212.0	178.5	162.9	98.2	80.3	87.0	102.6	82.6	37.9
87.5°	17.8	17.8	142.8	118.2	73.6	49.0	51.4	55.7	60.2	49.0	29.0
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: P196482

CATALOG NUMBER: NAV-AF-06-D-UNV-AFL-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3	8279.3
2.5°	8257.0	8107.6	7779.6	7462.7	7186.1	6882.7	6728.7	6550.3	6483.3	6349.5	6362.9
5°	8341.8	8029.5	7371.2	6677.5	6041.6	5394.5	4935.0	4502.2	4261.2	4022.5	4022.5
7.5°	8428.8	7951.4	6934.0	5825.1	4754.3	3645.6	2860.2	2231.1	1880.8	1646.5	1639.8
10°	8489.0	7851.0	6436.5	4836.9	3257.3	1878.5	1133.3	892.4	805.4	767.4	765.3
12.5°	8567.1	7750.7	5869.9	3672.3	1809.4	892.4	707.2	669.3	653.7	644.7	644.7
15°	8634.1	7607.8	5182.7	2469.7	950.4	669.3	609.1	595.7	593.5	591.2	593.5
17.5°	8649.7	7404.8	4359.5	1445.7	689.4	584.5	557.8	546.7	546.7	544.3	544.3
20°	8614.0	7137.1	3449.2	892.4	595.7	537.7	508.7	495.3	493.1	493.1	493.1
22.5°	8540.4	6795.7	2550.1	676.0	542.2	495.3	457.4	443.9	443.9	446.3	448.4
25°	8448.9	6391.8	1751.3	582.4	501.9	450.7	412.8	399.4	403.8	408.3	410.5
27.5°	8332.8	5910.0	1146.7	504.2	448.4	406.0	372.6	363.7	372.6	381.6	386.0
30°	8216.9	5381.2	776.4	437.2	388.2	356.9	336.8	334.7	348.0	368.1	370.4
32.5°	8141.0	4839.1	586.7	392.7	341.3	314.5	305.6	310.1	330.2	352.5	356.9
35°	8134.4	4310.4	499.8	356.9	310.1	285.6	281.2	294.5	316.9	334.7	339.1
37.5°	8239.1	3815.0	452.9	330.2	285.6	261.0	254.3	278.8	299.0	316.9	321.2
40°	8451.1	3371.0	421.6	305.6	265.5	236.4	232.0	252.1	272.2	292.3	299.0
42.5°	8716.6	2956.1	386.0	281.2	243.2	209.7	205.3	220.9	240.9	270.0	274.5
45°	8946.3	2570.1	348.0	254.3	218.6	180.8	178.5	196.3	212.0	238.7	243.2
47.5°	9140.5	2248.9	312.4	225.3	187.4	160.6	158.4	167.2	176.2	200.8	205.3
50°	9037.9	1976.7	276.7	185.2	151.8	138.3	136.1	136.1	147.3	171.7	176.2
52.5°	8785.7	1807.1	243.2	153.9	124.9	118.2	111.6	113.7	124.9	136.1	138.3
55°	8582.8	1726.9	214.1	136.1	104.9	98.2	91.4	89.3	91.4	87.0	82.6
56°	8533.7	1717.9	207.5	131.6	100.4	91.4	82.6	78.1	75.8	66.9	64.7
57.5°	8511.4	1717.9	196.3	122.7	93.8	82.6	71.3	62.5	53.5	46.9	46.9
60°	8493.5	1729.0	182.9	107.1	80.3	66.9	51.4	37.9	31.2	31.2	31.2
62.5°	8455.6	1724.5	167.2	89.3	69.2	51.4	31.2	24.6	22.3	24.6	26.8
65°	8029.5	1601.8	147.3	71.3	53.5	35.7	17.8	17.8	20.1	24.6	26.8
67.5°	6470.0	1213.7	120.5	55.7	37.9	26.8	15.7	15.7	20.1	24.6	26.8
70°	3553.9	640.3	102.6	40.2	29.0	22.3	15.7	13.4	20.1	24.6	26.8
72.5°	867.8	267.6	93.8	31.2	26.8	20.1	13.4	13.4	20.1	24.6	26.8
75°	214.1	200.8	75.8	24.6	22.3	17.8	13.4	13.4	20.1	24.6	26.8
77.5°	100.4	265.5	51.4	22.3	20.1	15.7	13.4	13.4	20.1	24.6	24.6
80°	60.2	200.8	31.2	20.1	17.8	15.7	13.4	13.4	20.1	24.6	26.8
82.5°	35.7	58.0	22.3	20.1	17.8	13.4	13.4	13.4	20.1	24.6	26.8
85°	31.2	29.0	22.3	20.1	17.8	15.7	13.4	13.4	22.3	26.8	26.8
87.5°	24.6	22.3	20.1	17.8	17.8	15.7	13.4	13.4	20.1	24.6	26.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)