

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: P965218

Luminaire Tested: **NAV-SB3D-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

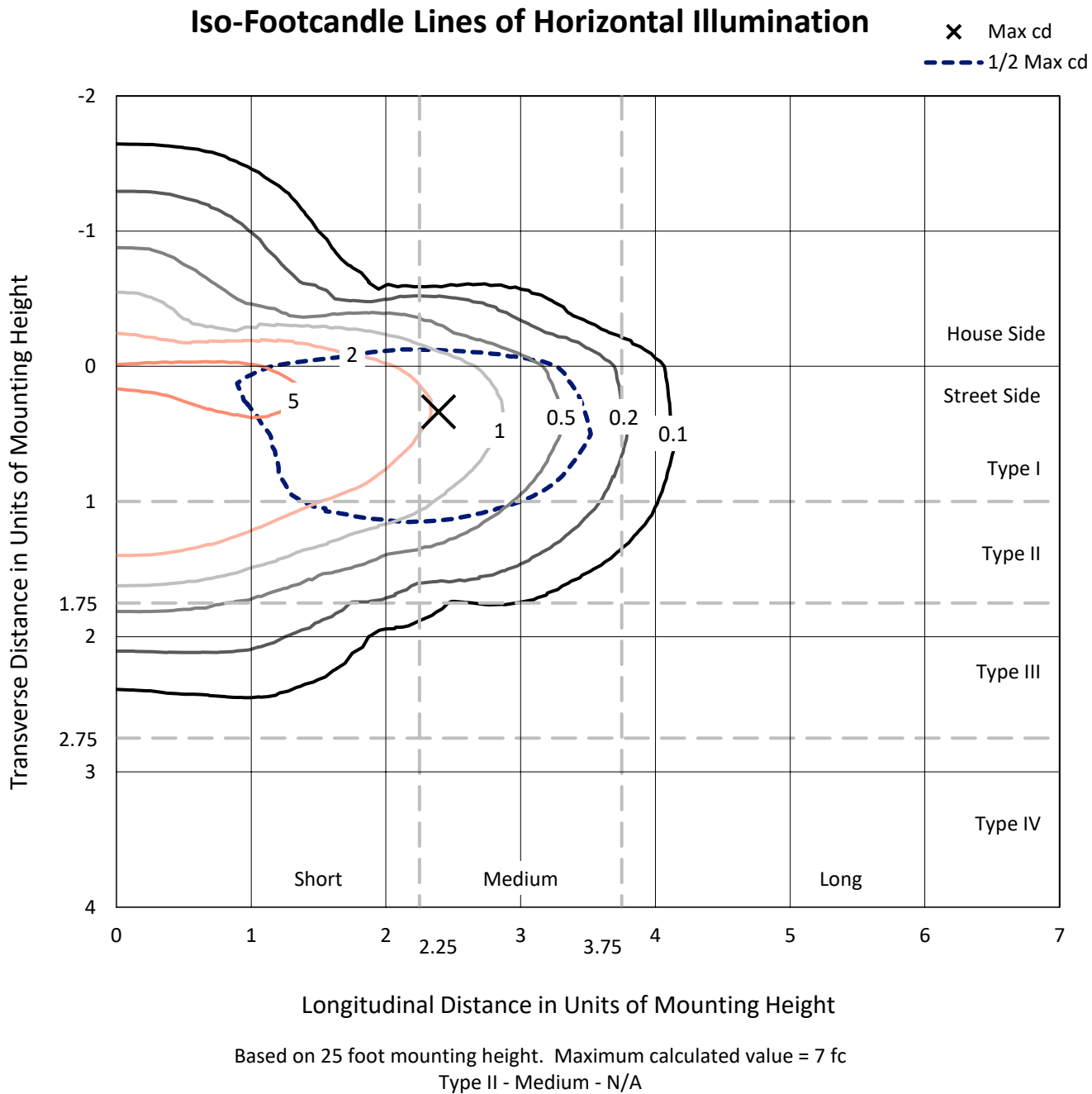
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19871.7 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 218.1
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: 24 FT

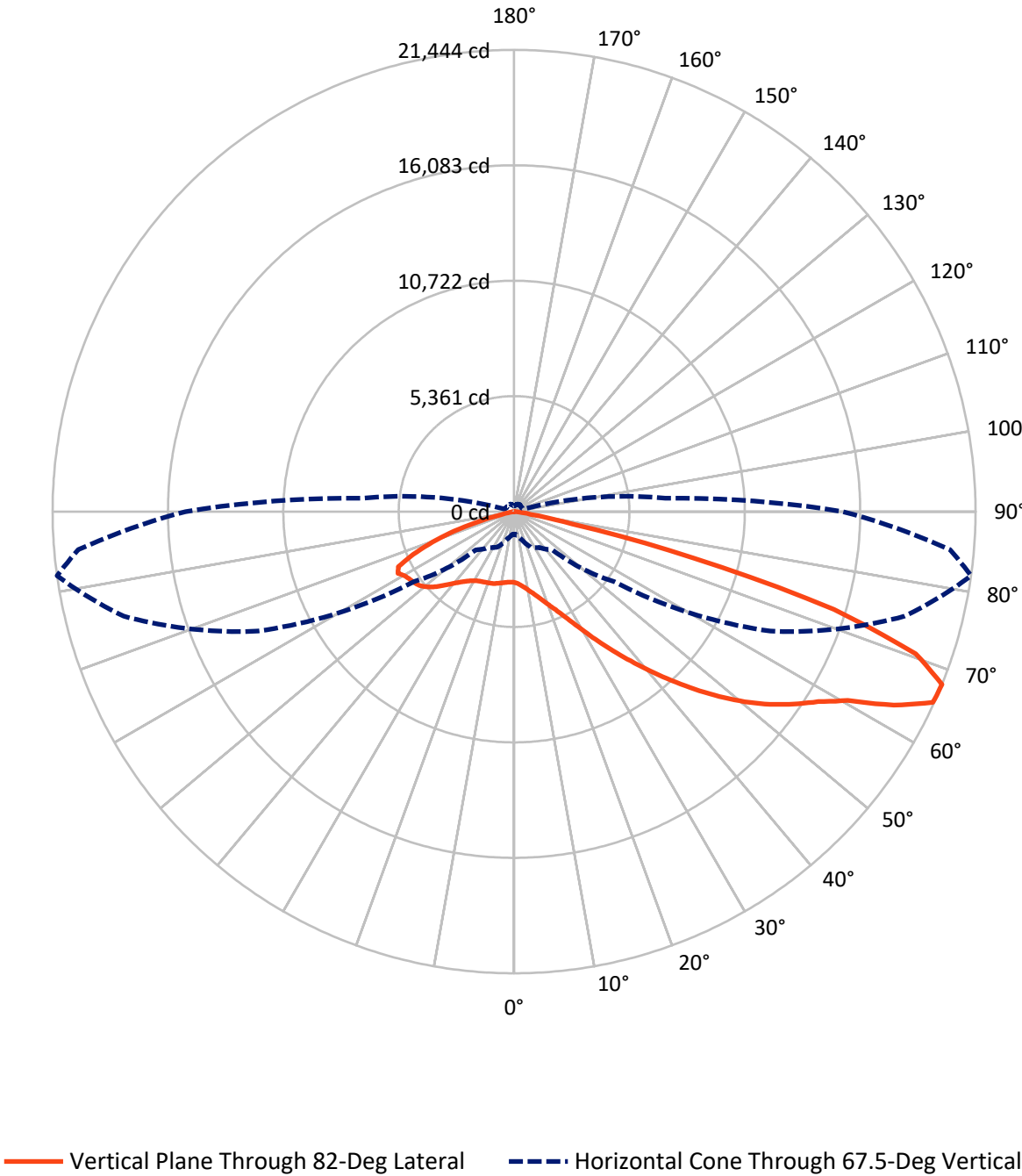


REPORT NUMBER: P965218
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Luminous Intensity Polar Plot



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CATALOG NUMBER: NAV-SB3D-827-U-T2-HSS

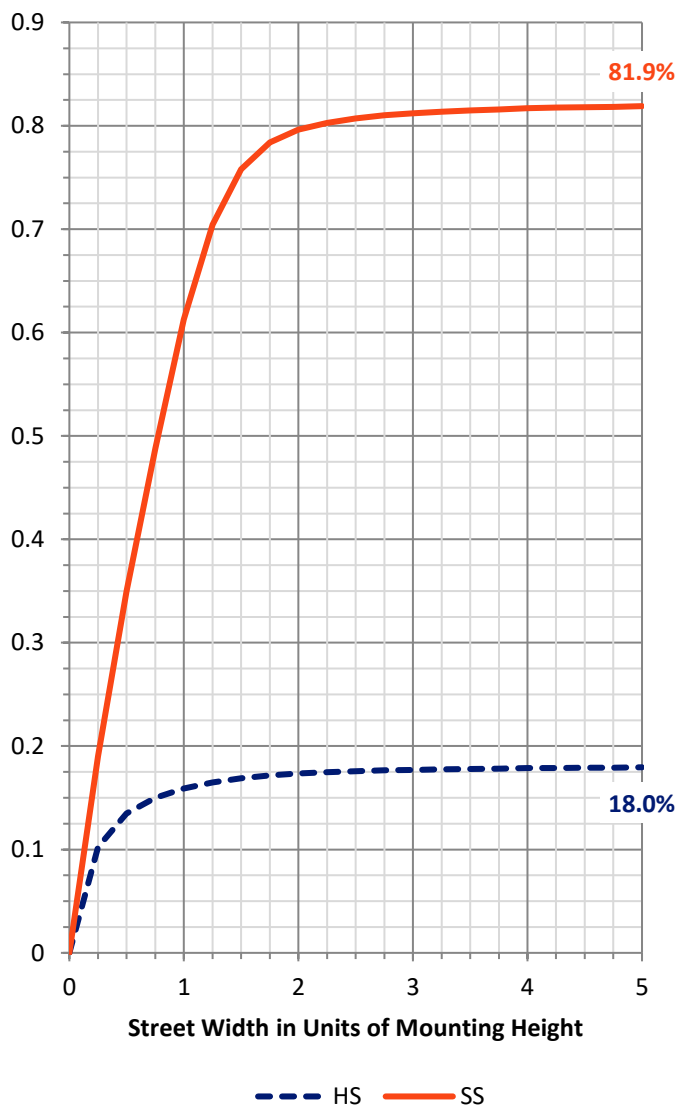
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3599.6	0.0	3599.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16272.1	0.0	16272.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	19871.7	0.0	19871.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.3	1.5
10°-20°	762.2	3.8
20°-30°	1220.7	6.1
30°-40°	2158.6	10.9
40°-50°	3782.2	19.0
50°-60°	5044.3	25.4
60°-70°	4696.0	23.6
70°-80°	1802.3	9.1
80°-90°	111.9	0.6
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°	19871.7	100.0
0°-180°	19871.7	100.0

Coefficient of Utilization



REPORT NUMBER: P965218

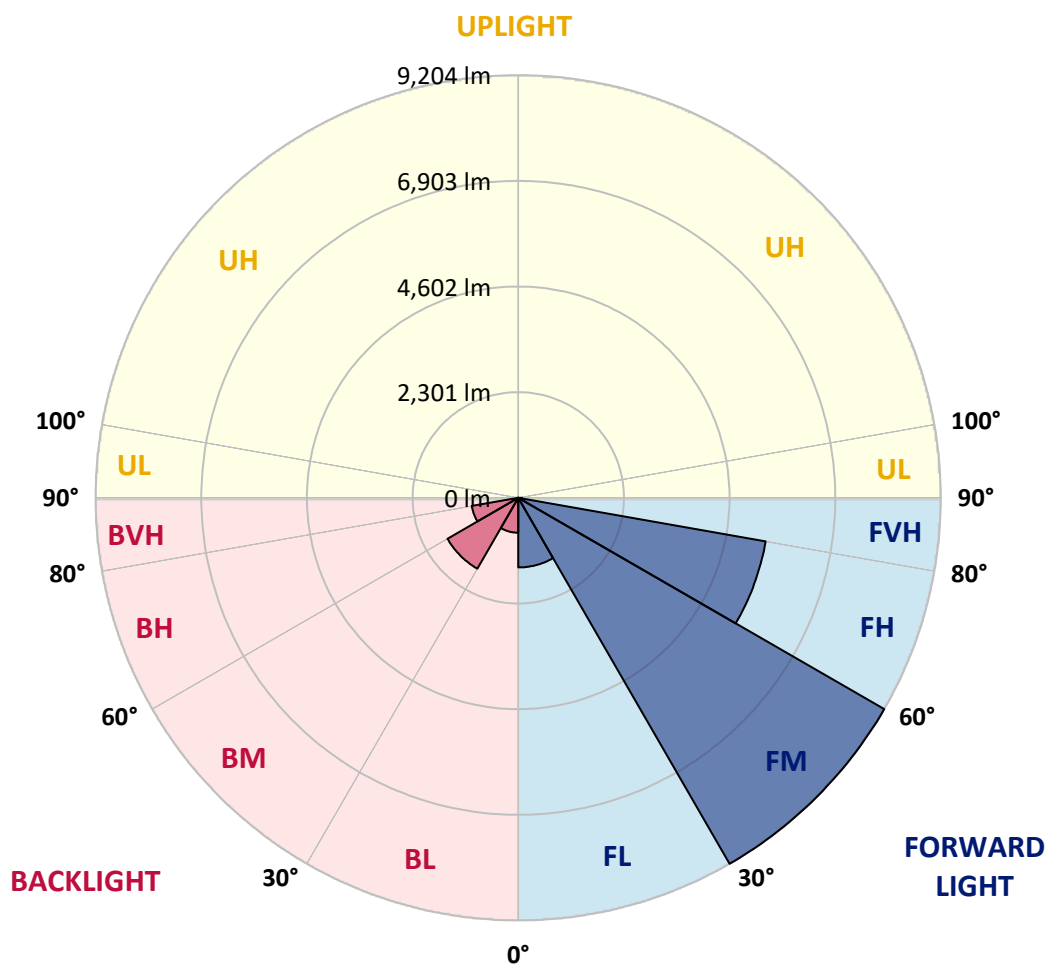
CATALOG NUMBER: NAV-SB3D-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1516.0	7.6			
FM	(30°-60°)	9203.7	46.3			
FH	(60°-80°)	5471.0	27.5			G3/7500
FVH	(80°-90°)	81.4	0.4			G1/100
BL	(0°-30°)	760.2	3.8	B2/1000		
BM	(30°-60°)	1781.4	9.0	B2/2500		
BH	(60°-80°)	1027.4	5.2	B3/2500		G3/2500
BVH	(80°-90°)	30.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P965218

CATALOG NUMBER: NAV-SB3D-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1
2.5°	3479.5	3499.6	3488.1	3482.3	3472.3	3458.0	3446.6	3410.8	3373.6	3349.3	3340.7
5°	3549.6	3569.7	3568.2	3573.9	3581.0	3585.3	3582.5	3542.4	3489.5	3448.0	3423.7
7.5°	3489.5	3512.4	3531.0	3559.6	3609.6	3662.6	3688.4	3679.7	3625.4	3568.2	3538.1
10°	3319.3	3343.6	3387.9	3455.2	3561.1	3675.4	3771.4	3815.7	3781.3	3718.4	3676.9
12.5°	3007.4	3031.6	3119.0	3264.8	3442.3	3641.1	3824.3	3943.1	3951.6	3888.6	3840.1
15°	2656.8	2681.2	2774.2	2957.2	3227.7	3546.7	3852.9	4077.6	4153.4	4099.0	4040.3
17.5°	2439.4	2460.8	2530.9	2678.3	2960.1	3357.9	3842.9	4220.6	4393.7	4350.8	4280.7
20°	2373.6	2392.1	2425.0	2528.1	2762.7	3161.9	3777.1	4355.1	4652.7	4628.4	4549.7
22.5°	2443.7	2460.8	2470.9	2516.6	2664.0	3033.1	3694.1	4492.5	4953.1	4956.0	4860.1
25°	2605.3	2622.5	2611.1	2639.7	2704.1	2993.0	3662.6	4654.1	5330.8	5362.3	5253.5
27.5°	2871.4	2872.9	2845.7	2844.3	2854.3	3053.2	3695.5	4827.2	5807.2	5865.9	5731.4
30°	3405.0	3383.6	3279.2	3166.1	3114.7	3233.4	3787.1	5031.8	6369.6	6474.0	6305.2
32.5°	4227.7	4196.2	4004.6	3734.2	3462.3	3523.8	3951.6	5265.0	6981.9	7170.7	6964.7
35°	5120.5	5111.9	4911.6	4509.6	4034.6	3937.3	4219.2	5571.2	7650.0	7950.4	7705.8
37.5°	5950.3	5946.0	5831.5	5358.0	4780.0	4513.9	4648.4	5971.8	8365.3	8800.3	8511.3
40°	6708.6	6721.4	6607.0	6183.5	5601.2	5253.5	5232.1	6466.8	9160.8	9725.9	9382.6
42.5°	7363.9	7378.2	7262.3	6949.0	6412.4	6071.9	5948.9	7073.4	9937.7	10720.3	10314.0
45°	7808.9	7897.5	7880.3	7630.0	7245.1	6891.7	6810.2	7834.6	10823.3	11774.8	11298.3
47.5°	7934.7	8016.3	8145.1	8179.4	7944.8	7597.1	7694.4	8751.7	11718.9	12830.6	12288.4
50°	7624.3	7700.1	7967.6	8323.9	8487.0	8379.7	8554.2	9734.5	12636.0	13883.6	13259.8
52.5°	7011.9	7089.2	7426.8	7990.5	8655.8	8993.5	9417.0	10703.2	13524.5	14880.8	14179.7
55°	6126.3	6207.8	6641.4	7279.4	8333.9	9246.7	10136.5	11670.3	14338.6	15777.8	15009.6
57.5°	4921.6	4981.7	5432.4	6325.2	7524.1	8994.9	10667.4	12726.2	15105.4	16659.2	15832.3
60°	3207.6	3260.6	3784.2	4780.0	6182.1	8153.6	10773.3	13903.6	16124.1	17805.2	16941.0
62.5°	2133.2	2169.0	2479.4	3210.5	4353.7	6538.4	10153.8	14843.6	17617.8	19799.6	18842.5
65°	1463.6	1499.4	1809.8	2319.2	2812.8	4325.0	8372.5	14719.1	18971.2	21383.3	20251.7
67.5°	1044.4	1074.5	1337.7	1818.5	2035.9	2512.4	5675.6	13128.2	18776.7	21443.5	20327.5
70°	748.2	765.5	982.9	1416.4	1618.2	1509.4	3156.2	10040.7	16440.3	19801.1	18779.5
72.5°	523.7	529.4	682.4	1078.7	1303.4	1101.7	1502.2	6694.3	12434.3	15541.8	14558.9
75°	354.9	361.9	459.3	791.2	1045.8	841.2	795.5	3589.7	7299.4	8602.8	7711.5
77.5°	217.5	220.4	296.1	540.8	782.6	640.9	512.2	1520.9	2824.2	2772.7	2363.5
80°	123.0	123.0	188.8	336.2	533.6	413.5	359.1	646.7	894.2	785.5	692.5
82.5°	68.7	70.1	137.4	208.9	353.4	244.7	197.4	299.0	386.3	341.9	297.6
85°	28.6	31.5	84.5	98.7	168.8	121.6	80.2	125.9	143.1	127.3	93.0
87.5°	2.9	4.3	25.7	18.6	20.0	24.3	11.5	24.3	20.0	20.0	14.3
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: P965218

CATALOG NUMBER: NAV-SB3D-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1	3292.1
2.5°	3313.5	3292.1	3237.7	3174.7	3091.8	3051.7	2997.3	2960.1	2928.6	2931.5	2902.9
5°	3377.9	3323.6	3201.9	3050.3	2861.4	2726.9	2583.8	2485.1	2405.1	2387.8	2349.2
7.5°	3466.7	3380.8	3167.6	2894.3	2575.3	2333.5	2117.4	1978.7	1880.0	1848.5	1817.0
10°	3581.0	3456.6	3123.3	2698.3	2239.1	1931.4	1699.7	1590.9	1523.7	1500.8	1483.7
12.5°	3714.1	3543.8	3064.5	2459.4	1892.9	1596.6	1449.4	1394.9	1373.5	1366.3	1362.0
15°	3881.5	3652.6	2975.9	2176.1	1599.5	1392.1	1329.1	1321.9	1324.8	1321.9	1320.5
17.5°	4080.4	3771.4	2831.4	1884.3	1402.1	1287.6	1264.7	1270.5	1277.7	1276.2	1273.4
20°	4297.8	3888.6	2646.9	1625.2	1267.6	1213.3	1200.4	1206.1	1211.9	1209.0	1207.6
22.5°	4545.4	4014.6	2442.3	1423.5	1177.5	1144.6	1130.3	1131.7	1131.7	1126.0	1123.1
25°	4841.5	4153.4	2227.6	1280.5	1108.8	1083.0	1065.9	1060.2	1051.5	1034.4	1031.6
27.5°	5194.9	4300.7	2021.6	1180.3	1054.4	1030.1	1010.0	995.8	974.3	945.7	942.8
30°	5592.6	4479.6	1847.0	1117.4	1011.5	987.2	964.3	942.8	911.3	875.6	872.7
32.5°	6060.5	4671.2	1719.7	1075.9	972.9	947.1	919.9	894.2	859.9	824.1	825.5
35°	6618.4	4903.1	1645.3	1047.2	942.8	908.5	878.4	849.8	824.1	792.6	789.8
37.5°	7223.7	5149.1	1622.5	1033.0	922.8	869.9	835.6	815.5	812.6	794.1	792.6
40°	7886.0	5441.0	1639.6	1024.4	901.4	832.7	795.5	791.2	798.4	765.5	766.9
42.5°	8587.1	5787.3	1668.2	1014.3	871.4	795.5	759.7	759.7	754.0	708.2	708.2
45°	9345.4	6186.4	1696.8	990.0	835.6	758.3	731.1	721.1	696.8	652.4	651.0
47.5°	10109.4	6592.7	1718.3	945.7	792.6	726.8	702.4	679.6	643.8	603.7	602.3
50°	10834.8	6957.5	1695.4	879.9	743.9	696.8	671.0	639.5	600.9	573.7	569.4
52.5°	11482.9	7273.7	1598.1	802.7	692.5	665.3	642.4	609.5	578.0	549.4	546.5
55°	12046.6	7529.9	1426.4	729.7	646.7	638.1	615.2	573.7	530.7	506.5	503.6
57.5°	12587.4	7724.4	1211.9	669.5	605.2	608.0	573.7	536.5	496.4	470.7	467.8
60°	13307.1	7984.7	994.4	613.8	560.9	569.4	532.2	505.0	455.0	422.1	417.8
62.5°	14457.3	8389.7	789.8	545.1	509.3	512.2	496.4	463.5	403.4	364.8	361.9
65°	15370.1	8240.9	622.4	470.7	450.7	455.0	455.0	419.2	354.9	310.5	306.2
67.5°	15267.1	7056.3	496.4	397.7	394.8	397.7	407.7	377.7	314.8	279.0	273.3
70°	14063.9	5612.7	397.7	330.5	343.4	336.2	364.8	344.8	283.3	247.5	243.2
72.5°	11475.7	4043.2	303.3	273.3	263.2	274.7	329.0	310.5	236.1	196.0	191.7
75°	6705.8	2157.5	226.0	216.1	190.2	228.9	291.8	264.7	180.3	144.5	140.2
77.5°	2183.2	752.6	165.9	158.8	141.7	184.6	249.0	223.1	147.4	114.5	110.2
80°	585.2	227.4	113.1	104.4	91.5	137.4	197.4	177.4	105.9	74.4	73.0
82.5°	234.6	95.8	65.8	58.6	50.1	94.4	155.9	143.1	78.7	47.3	47.3
85°	75.8	31.5	24.3	18.6	22.9	58.6	93.0	97.3	55.8	24.3	18.6
87.5°	10.0	4.3	4.3	5.7	4.3	10.0	28.6	27.2	15.8	2.9	0.0
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)