

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: P962915

Luminaire Tested: **NAV-SB2D-727-U-SL3-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2D-727-U-SL3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15581 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G3

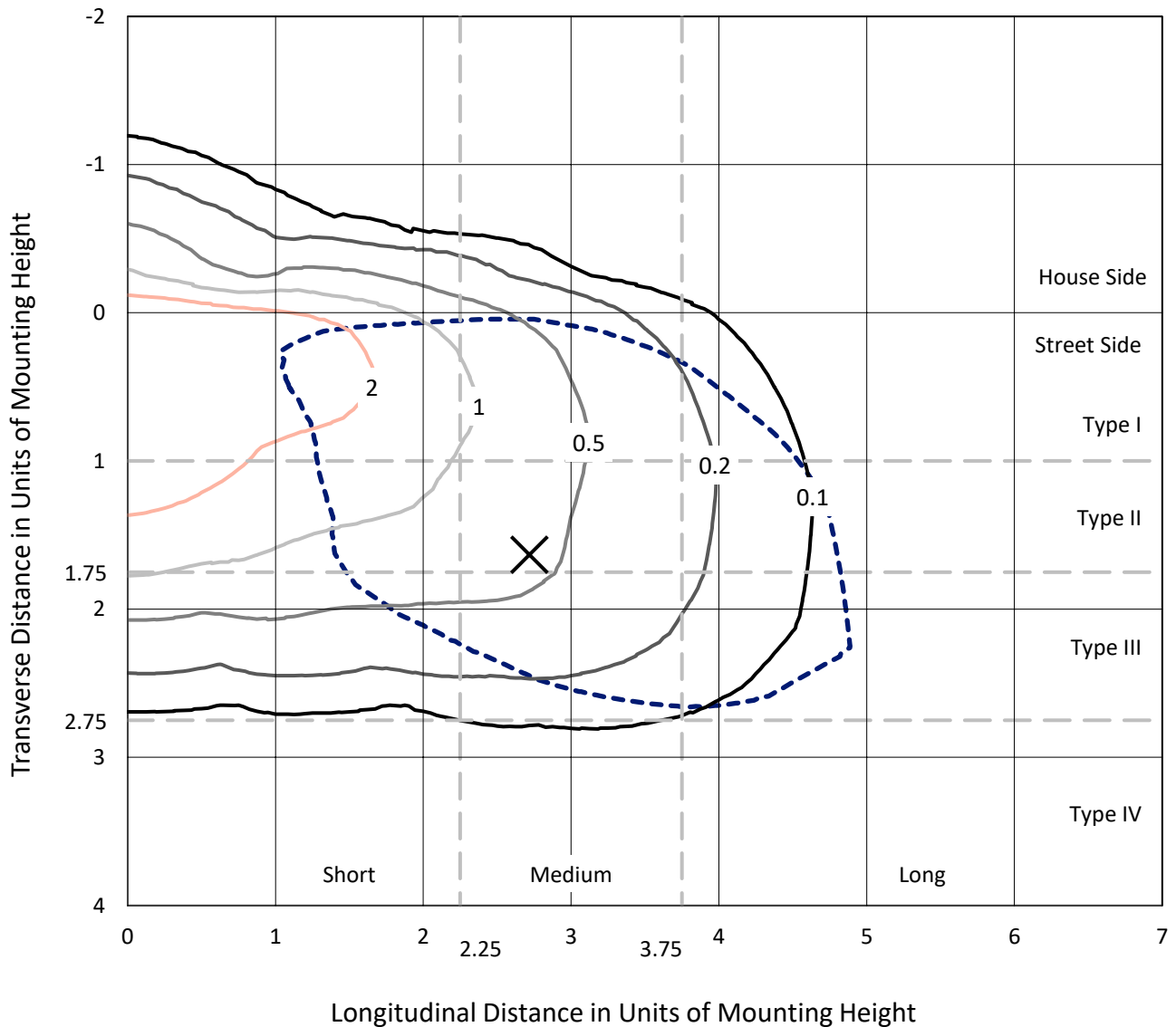
Input Watts (W): 147.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P962915  
 CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

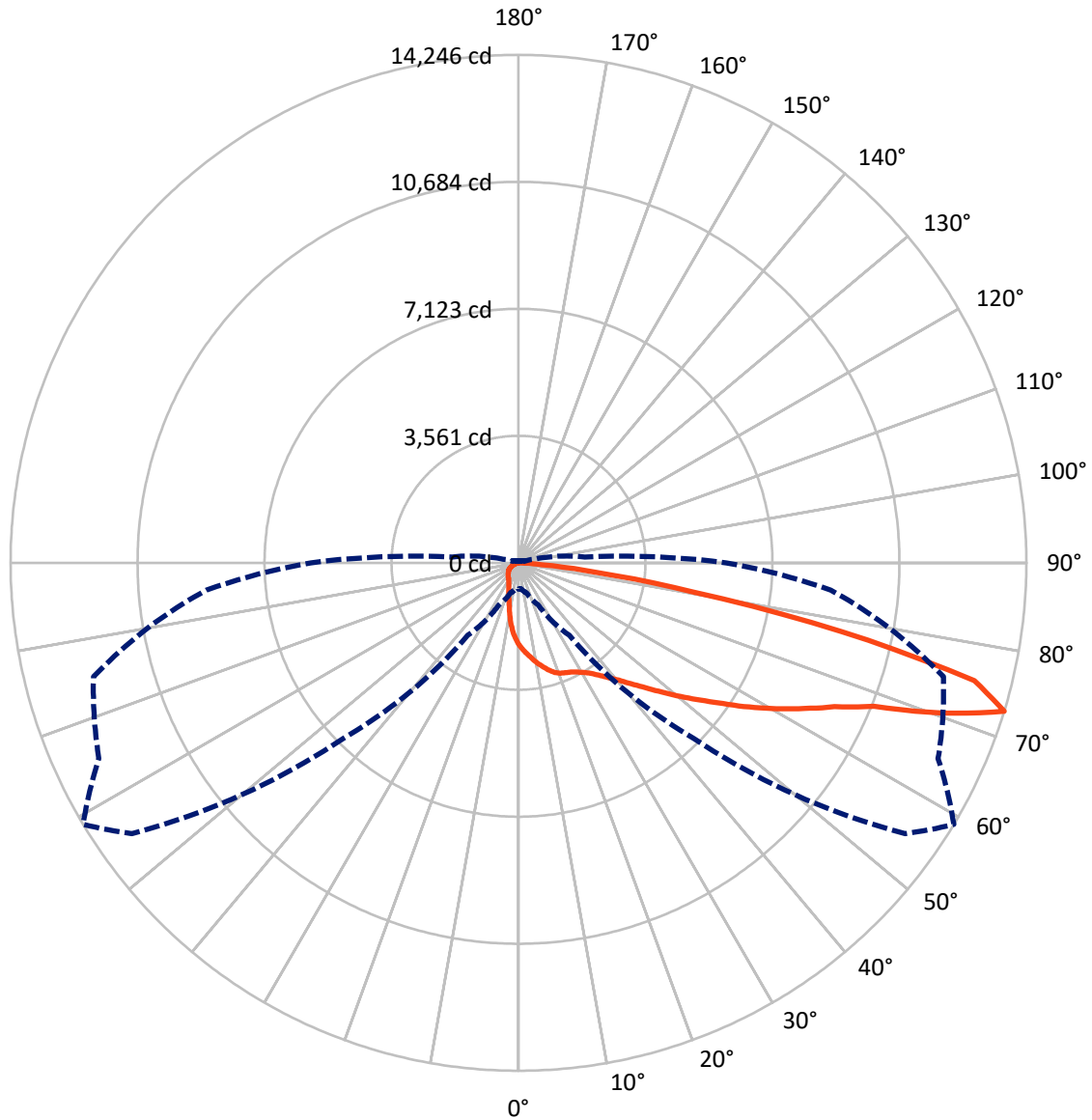
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type III - Medium - N/A

REPORT NUMBER: P962915  
CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P962915  
 CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

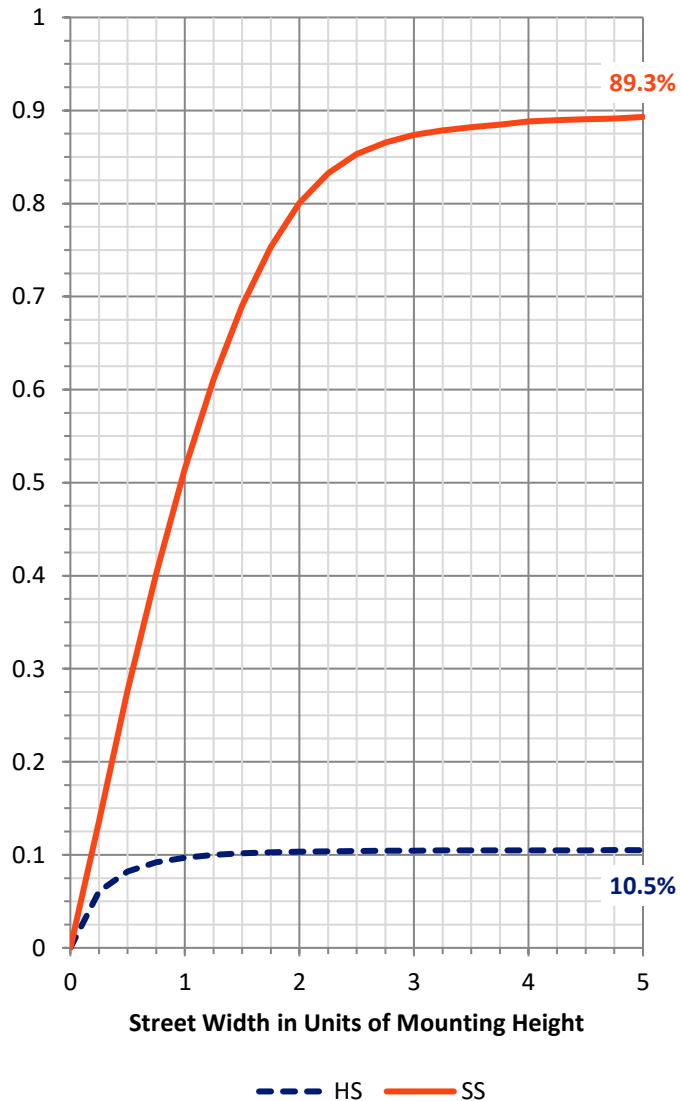
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1645.7	0.0	1645.7
	% Fixture	10.6	0.0	10.6
<b>Street Side</b>	Lumens	13935.3	0.0	13935.3
	% Fixture	89.4	0.0	89.4
<b>Total</b>	Lumens	15581.0	0.0	15581.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.5	1.3
10°-20°	553.7	3.6
20°-30°	877.5	5.6
30°-40°	1408.3	9.0
40°-50°	2249.3	14.4
50°-60°	3256.6	20.9
60°-70°	3864.8	24.8
70°-80°	2869.1	18.4
80°-90°	293.3	1.9
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°	15581.0	100.0
0°-180°	15581.0	100.0

**Coefficient of Utilization**

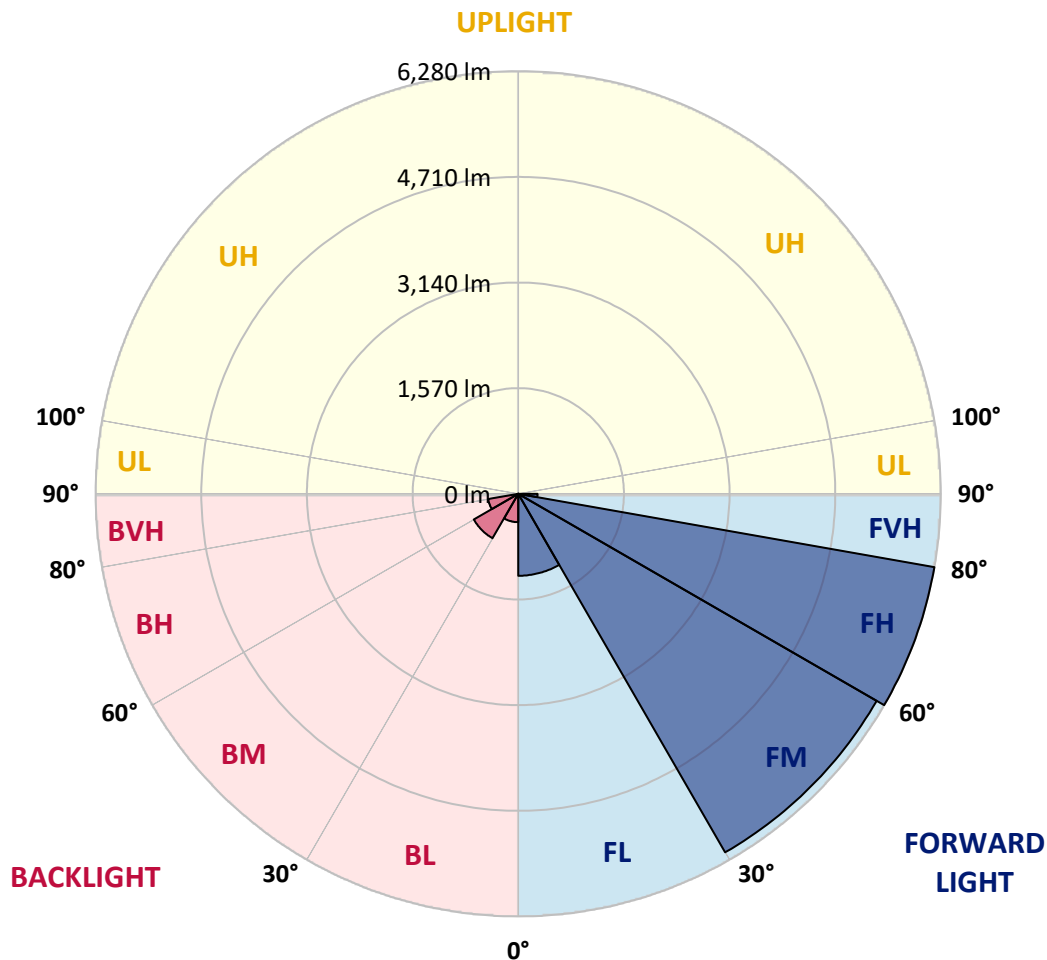


REPORT NUMBER: P962915  
 CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1218.1	7.8			
FM (30°-60°)	6151.2	39.5			
FH (60°-80°)	6280.0	40.3			G3/7500
FVH (80°-90°)	286.0	1.8			G3/500
BL (0°-30°)	421.6	2.7	B1/500		
BM (30°-60°)	763.0	4.9	B1/1000		
BH (60°-80°)	453.8	2.9	B1/500		G1/500
BVH (80°-90°)	7.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**  
 Type III Medium



REPORT NUMBER: P962915  
 CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1
2.5°	2556.4	2542.1	2544.2	2519.8	2502.4	2484.1	2448.5	2443.4	2418.0	2373.3	2327.5
5°	2779.1	2770.0	2761.9	2734.4	2698.7	2654.0	2594.0	2572.6	2525.8	2448.5	2359.0
7.5°	2941.9	2930.7	2934.8	2907.3	2878.8	2829.0	2746.6	2706.9	2644.8	2526.8	2391.5
10°	2973.4	2967.3	2993.7	3004.0	3004.0	2972.4	2892.0	2852.4	2761.9	2611.3	2425.1
12.5°	2796.4	2797.4	2863.5	2942.9	3046.6	3076.1	3022.2	2979.5	2890.0	2700.8	2467.8
15°	2589.9	2590.9	2655.1	2756.7	2926.6	3096.5	3139.3	3111.8	3019.1	2797.4	2517.7
17.5°	2465.8	2460.7	2503.5	2586.9	2764.8	3004.0	3210.4	3228.7	3153.4	2904.2	2572.6
20°	2448.5	2439.4	2461.7	2503.5	2630.6	2887.9	3218.6	3305.0	3291.8	3025.3	2635.7
22.5°	2554.3	2540.1	2527.9	2529.9	2583.8	2791.3	3198.2	3347.8	3434.3	3170.7	2722.2
25°	2763.8	2741.5	2701.8	2651.0	2639.8	2771.0	3184.0	3394.6	3566.5	3356.9	2836.1
27.5°	3020.2	2988.7	2912.3	2836.1	2771.0	2828.0	3213.5	3468.8	3716.0	3573.6	2968.3
30°	3301.9	3263.3	3187.0	3042.6	2938.8	2955.1	3283.7	3566.5	3907.2	3818.7	3134.1
32.5°	3716.0	3626.4	3493.2	3272.5	3135.2	3092.4	3389.5	3690.6	4144.3	4145.3	3374.2
35°	4071.0	4021.2	3886.9	3612.2	3330.4	3274.5	3528.9	3865.6	4472.8	4577.6	3709.9
37.5°	4304.0	4235.8	4117.8	3911.3	3633.6	3461.7	3715.0	4080.2	4820.8	5070.0	4123.9
40°	4564.4	4497.3	4340.6	4146.3	3985.6	3783.2	3949.9	4327.3	5202.2	5575.5	4596.9
42.5°	4878.7	4791.3	4606.0	4396.5	4228.7	4206.3	4257.1	4635.6	5593.8	6124.9	5089.3
45°	5248.0	5165.6	4953.0	4688.5	4541.0	4501.3	4643.8	4994.7	6030.3	6727.1	5586.8
47.5°	5593.8	5498.2	5269.3	5028.2	4864.4	4739.4	5054.7	5418.9	6524.6	7356.7	6056.7
50°	5887.8	5790.1	5580.6	5323.2	5212.3	5048.6	5458.5	5891.9	7014.9	7996.5	6486.0
52.5°	6089.2	6002.8	5756.6	5581.6	5506.4	5424.0	5931.6	6393.4	7503.2	8582.5	6910.1
55°	6043.5	5966.1	5749.4	5737.2	5732.2	5818.6	6497.2	6962.0	8000.6	9137.0	7332.3
57.5°	5898.0	5810.5	5539.9	5726.1	5906.2	6170.6	7109.5	7634.4	8545.8	9659.8	7739.2
60°	5469.7	5439.3	5274.4	5704.7	5979.3	6515.4	7809.4	8309.9	9135.9	10119.5	8100.4
62.5°	4563.4	4589.8	4588.8	5749.4	6111.7	6908.1	8445.2	8993.5	9712.7	10562.1	8421.8
65°	3416.9	3508.5	3625.4	5346.6	6288.6	7609.0	9205.0	9735.0	10298.6	11076.8	8748.3
67.5°	2295.9	2369.2	2448.5	4386.4	5761.7	8345.4	10467.5	10751.2	11000.5	11647.5	9115.5
70°	1314.3	1337.7	1448.5	2739.4	4441.3	8142.1	12523.3	12626.1	12047.2	12350.4	9383.1
72.5°	736.5	728.4	874.8	1300.0	2482.0	6972.3	13243.5	14245.6	12984.1	12339.2	8786.0
75°	492.3	493.3	602.2	819.9	967.4	4880.7	11412.5	13209.0	12422.6	10941.5	7178.7
77.5°	335.7	346.9	442.5	633.8	447.6	2381.4	7550.0	9252.9	10057.5	8449.3	4956.0
80°	145.4	146.5	291.9	454.7	302.2	757.9	3914.4	4957.0	6308.0	4744.4	1963.3
82.5°	75.2	85.5	186.1	294.0	190.2	265.5	1849.3	2165.7	2646.9	1392.6	402.8
85°	26.4	31.6	114.9	144.4	95.6	94.6	643.9	656.1	560.5	209.5	110.9
87.5°	0.0	5.1	44.8	35.6	12.2	11.2	76.3	64.1	50.8	29.5	36.6
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: P962915  
 CATALOG NUMBER: NAV-SB2D-727-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1	2304.1
2.5°	2306.1	2278.7	2233.9	2178.9	2114.9	2080.2	2030.4	1999.9	1972.4	1973.4	1995.9
5°	2309.1	2263.4	2149.4	2028.4	1894.1	1795.4	1685.6	1608.2	1549.3	1535.0	1556.4
7.5°	2318.3	2241.0	2054.8	1853.4	1629.6	1463.8	1312.2	1216.7	1162.8	1148.5	1162.8
10°	2330.5	2216.6	1948.0	1639.8	1362.1	1162.8	1036.6	975.5	951.1	932.9	944.0
12.5°	2340.7	2191.1	1813.7	1419.0	1124.0	968.4	872.8	821.9	800.5	787.3	794.5
15°	2358.0	2157.6	1668.3	1213.6	963.3	836.2	745.7	708.0	701.9	704.0	706.9
17.5°	2375.2	2125.0	1505.5	1052.9	845.3	720.2	665.3	659.2	667.3	675.5	678.6
20°	2394.6	2078.2	1340.7	931.8	736.5	639.8	625.6	629.7	633.8	648.0	652.1
22.5°	2423.1	2019.2	1196.3	829.0	646.0	601.2	594.1	597.2	600.1	614.4	618.5
25°	2463.8	1956.2	1079.3	734.4	589.0	569.7	562.5	562.5	566.6	579.8	585.0
27.5°	2506.5	1866.6	984.7	647.0	555.4	535.0	522.9	522.9	528.0	543.2	549.3
30°	2554.3	1785.2	910.4	581.9	527.0	500.5	484.2	480.1	486.3	505.5	510.7
32.5°	2640.8	1732.4	857.5	551.3	501.5	468.9	446.6	435.4	441.5	463.9	470.0
35°	2772.0	1720.2	820.9	536.1	477.1	440.4	409.0	391.7	396.7	420.1	427.2
37.5°	2925.6	1745.6	785.4	515.8	453.7	413.0	371.3	348.9	357.0	378.4	384.5
40°	3146.3	1851.4	757.9	500.5	430.3	380.5	333.6	311.3	324.5	342.9	345.8
42.5°	3412.8	2039.5	750.7	486.3	401.8	345.8	299.1	282.8	292.9	310.3	313.3
45°	3743.5	2279.6	783.3	467.9	370.2	312.3	271.6	262.4	265.5	282.8	290.9
47.5°	4098.5	2525.8	872.8	451.6	342.9	284.8	250.2	242.1	240.1	256.4	266.5
50°	4457.6	2744.5	978.6	439.4	323.5	262.4	234.0	223.8	218.7	228.9	233.0
52.5°	4812.6	2918.5	1047.8	419.1	304.1	240.1	219.8	204.5	195.3	200.4	204.5
55°	5172.7	3071.1	1051.9	388.6	285.9	225.8	205.5	188.2	177.0	177.0	179.1
57.5°	5509.4	3205.4	991.8	347.9	260.5	212.6	186.1	171.9	159.7	155.6	156.6
60°	5807.4	3305.0	892.2	302.2	238.0	195.3	166.9	155.6	140.4	132.2	130.2
62.5°	6072.9	3353.9	755.8	255.3	210.5	175.0	148.5	136.3	115.9	105.8	104.8
65°	6297.8	3304.0	613.4	211.6	187.2	152.6	127.2	114.9	92.6	80.4	80.4
67.5°	6520.5	3076.1	463.9	178.0	162.8	128.1	104.8	93.6	77.3	67.1	67.1
70°	6549.0	2597.0	324.5	149.5	135.3	98.7	84.5	77.3	63.0	53.9	52.9
72.5°	5829.8	1868.7	197.3	122.1	105.8	70.2	67.1	61.0	46.8	40.7	39.7
75°	4660.0	1145.4	115.9	91.5	70.2	49.8	49.8	43.8	31.6	26.4	26.4
77.5°	3220.5	599.1	68.2	59.0	41.7	29.5	32.6	26.4	15.3	12.2	12.2
80°	1289.9	227.9	36.6	27.5	19.4	13.2	11.2	6.1	3.1	2.0	3.1
82.5°	257.4	60.1	12.2	7.1	7.1	3.1	0.0	0.0	0.0	0.0	0.0
85°	66.1	13.2	3.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)