

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: P967117

Luminaire Tested: **NAV-SB4D-722-U-T3R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4D-722-U-T3R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35451.7 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

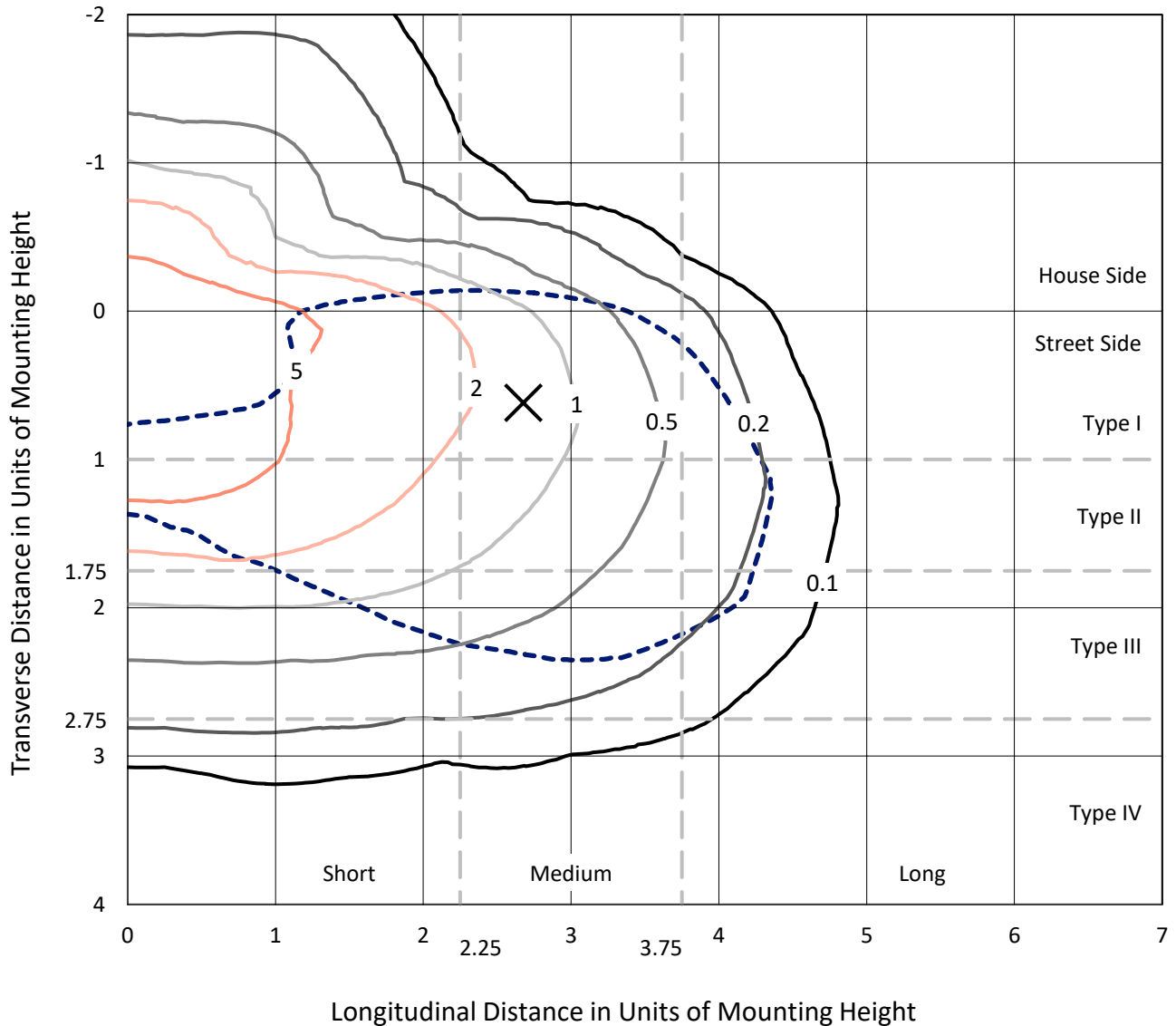
Input Watts (W): 293.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P967117  
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### Iso-Footcandle Lines of Horizontal Illumination

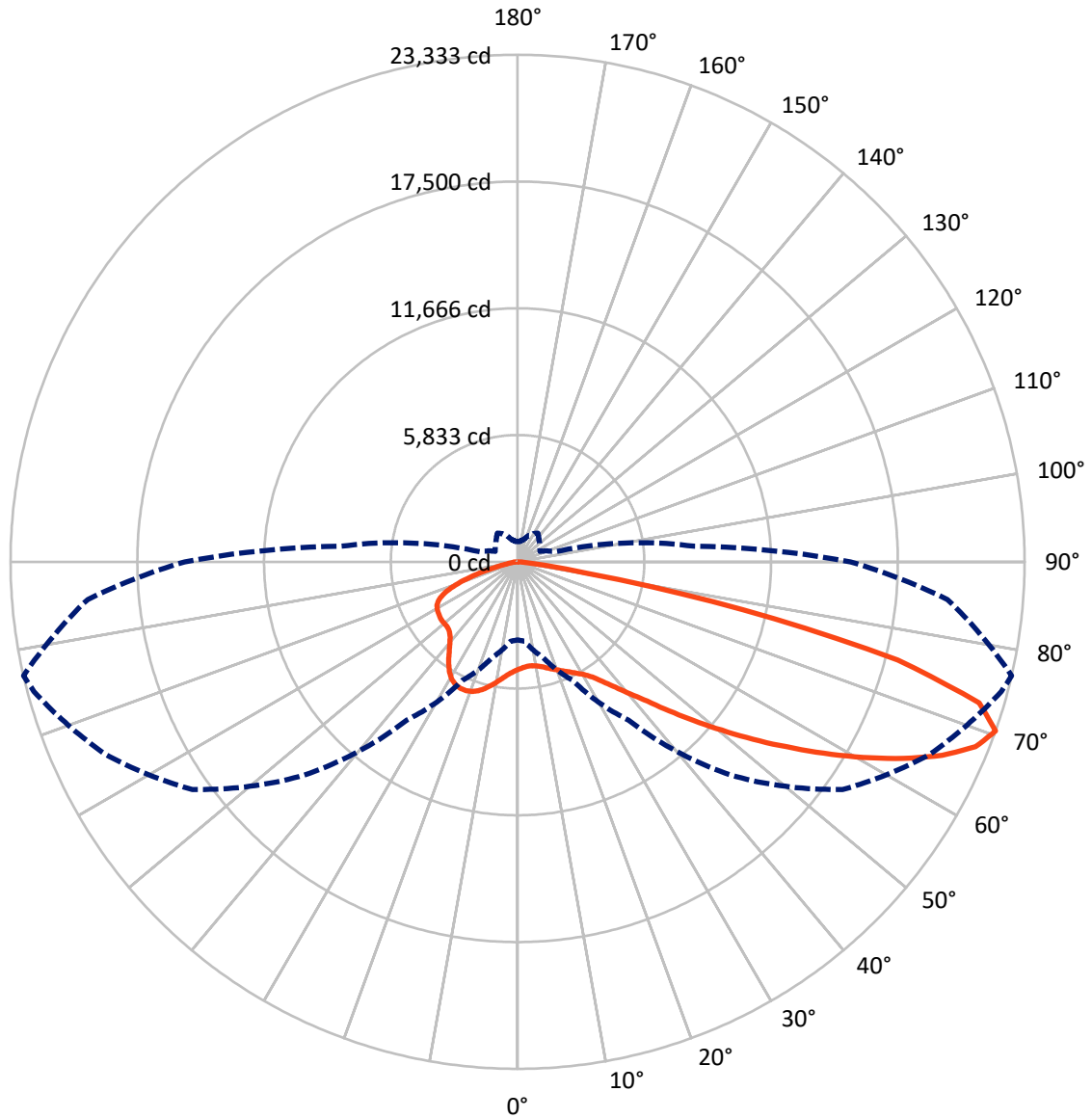
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc  
 Type III - Medium - N/A

REPORT NUMBER: P967117  
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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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 CATALOG NUMBER: NAV-SB4D-722-U-T3R

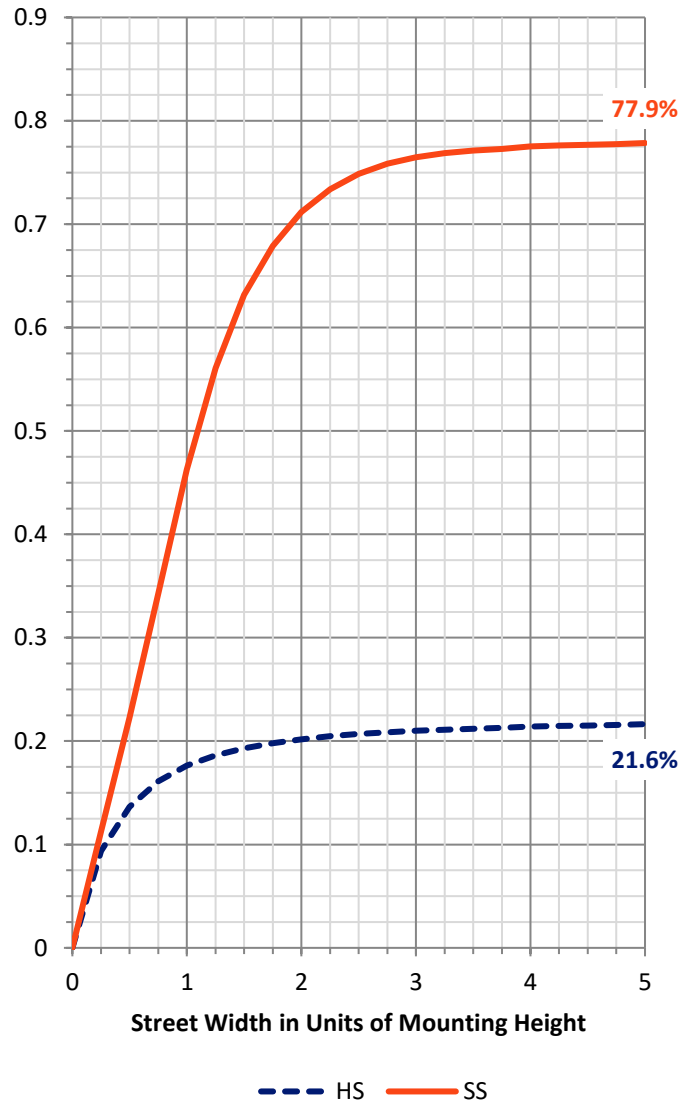
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7763.4	0.0	7763.4
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	27688.3	0.0	27688.3
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	35451.7	0.0	35451.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.7	1.3
10°-20°	1361.4	3.8
20°-30°	2328.1	6.6
30°-40°	3743.9	10.6
40°-50°	5845.2	16.5
50°-60°	7807.8	22.0
60°-70°	8321.9	23.5
70°-80°	5122.9	14.5
80°-90°	448.9	1.3
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°	35451.7	100.0
0°-180°	35451.7	100.0

**Coefficient of Utilization**

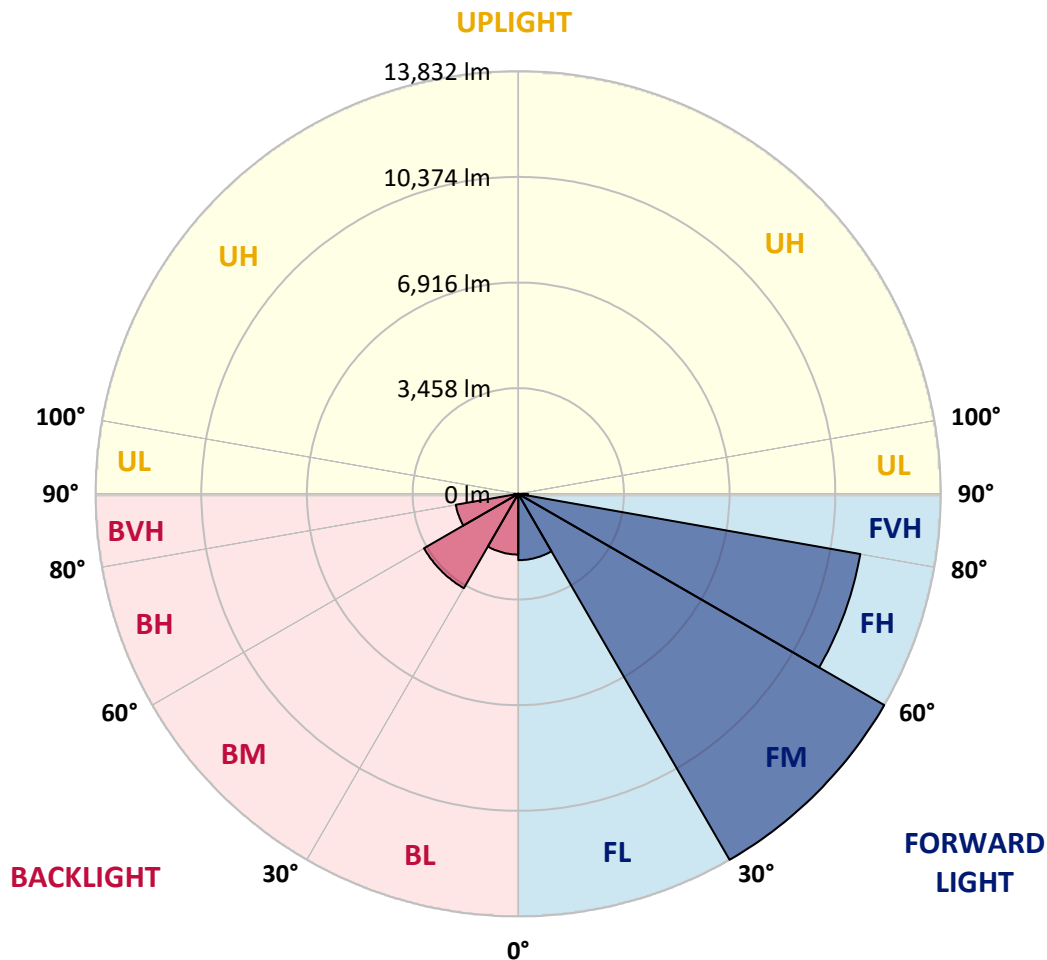


REPORT NUMBER: P967117  
 CATALOG NUMBER: NAV-SB4D-722-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2172.0	6.1			
FM (30°-60°)	13832.5	39.0			
FH (60°-80°)	11369.9	32.1			G4/12000
FVH (80°-90°)	313.9	0.9			G3/500
BL (0°-30°)	1989.2	5.6	B3/2500		
BM (30°-60°)	3564.3	10.1	B3/5000		
BH (60°-80°)	2074.8	5.9	B3/2500		G3/2500
BVH (80°-90°)	135.0	0.4			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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8
2.5°	4559.1	4557.3	4580.9	4588.1	4631.8	4662.6	4720.7	4782.4	4862.3	4871.4	4920.4
5°	4295.9	4295.9	4323.0	4352.2	4408.4	4470.1	4559.1	4666.2	4804.2	4826.0	4947.7
7.5°	4072.5	4087.0	4110.7	4166.9	4232.3	4321.3	4457.4	4609.9	4791.5	4826.0	5022.1
10°	3892.7	3909.1	3938.2	3983.6	4081.6	4205.1	4383.0	4579.1	4822.3	4876.8	5131.0
12.5°	3836.5	3852.8	3869.2	3903.6	3994.4	4139.7	4352.2	4593.6	4896.8	4951.3	5279.9
15°	3967.2	3987.1	3974.4	3965.4	4012.6	4145.1	4366.6	4646.2	4989.4	5067.5	5463.2
17.5°	4268.6	4275.9	4246.8	4161.5	4154.2	4225.0	4435.6	4718.9	5105.6	5190.9	5648.5
20°	4755.2	4742.5	4682.6	4513.7	4417.4	4403.0	4553.7	4827.9	5225.4	5316.3	5848.2
22.5°	5416.1	5401.5	5281.7	5014.8	4800.6	4658.9	4724.3	4969.4	5359.8	5461.5	6042.5
25°	6240.4	6220.4	6044.3	5681.2	5348.9	4998.5	4956.7	5156.5	5525.1	5619.5	6245.8
27.5°	7202.7	7186.4	6995.7	6516.3	6037.0	5463.2	5245.4	5376.1	5697.5	5804.7	6474.6
30°	8237.6	8284.8	7947.1	7431.5	6825.1	6069.7	5633.9	5646.6	5920.8	6017.1	6752.4
32.5°	9454.1	9535.8	9129.1	8475.4	7647.5	6728.8	6124.2	6024.3	6245.8	6325.7	7102.8
35°	10659.7	10752.2	10414.6	9692.0	8738.7	7505.9	6636.2	6458.3	6678.0	6765.1	7567.7
37.5°	11701.9	11825.3	11651.1	11022.8	9906.2	8442.8	7304.4	6968.5	7210.0	7318.9	8192.2
40°	12524.4	12713.2	12700.5	12308.3	11282.5	9579.3	8152.2	7598.5	7870.9	7988.8	8949.4
42.5°	13192.5	13356.0	13497.5	13477.6	12718.6	10870.3	9149.0	8417.4	8624.3	8760.5	9800.8
45°	13653.7	13828.0	14133.0	14461.6	14100.3	12252.0	10291.1	9388.7	9577.6	9782.7	10815.8
47.5°	14065.9	14263.8	14659.6	15180.7	15273.2	13639.2	11542.1	10519.9	10692.4	10904.8	11834.4
50°	14102.2	14272.8	14886.5	15625.5	16106.6	14971.9	12885.7	11789.0	11950.6	12177.6	12925.7
52.5°	13225.2	13493.9	14565.1	15612.8	16489.7	16086.7	14220.1	13109.0	13290.6	13562.9	14054.9
55°	10265.7	10659.7	13622.9	15126.2	16353.6	16807.4	15489.3	14512.5	14744.9	15030.0	15191.5
57.5°	8842.3	9014.7	10814.1	14240.1	15732.6	16994.5	16560.5	15930.6	16304.6	16616.8	16393.5
60°	7947.1	8090.5	9154.5	12862.1	14915.6	16698.6	17388.5	17252.3	17898.7	18270.9	17622.7
62.5°	6988.4	7124.6	8092.4	10739.5	13869.8	16206.5	17911.4	18472.4	19532.8	19939.4	18781.1
65°	6037.0	6153.3	7081.0	9023.8	12540.7	15714.5	18182.0	19527.3	21045.2	21466.5	19743.3
67.5°	4976.7	5072.9	5949.9	7613.0	10924.8	15040.8	18316.2	20357.1	22361.5	22722.9	20219.0
70°	3591.4	3665.8	4571.8	6020.7	8896.7	13882.5	18261.8	20945.4	23044.3	23332.9	19859.6
72.5°	1697.6	1764.8	2828.8	3909.1	6284.0	11627.4	17159.7	20478.7	22350.6	22207.2	17659.0
75°	906.0	964.1	1625.0	2144.3	3319.1	7970.7	14042.2	17640.9	18768.4	18071.2	13050.9
77.5°	613.7	659.1	1005.8	1287.3	1516.1	3783.8	9025.6	12213.9	11750.9	10599.7	6536.3
80°	486.6	533.8	824.3	871.6	733.5	1367.1	3729.4	5653.9	4061.6	3248.2	1859.2
82.5°	374.0	426.7	693.6	631.8	399.4	561.1	1085.8	1788.4	1040.4	791.6	450.3
85°	228.8	285.1	544.7	403.0	225.1	256.0	368.6	497.5	317.8	265.1	161.6
87.5°	116.2	163.4	275.9	147.1	101.7	60.0	98.1	98.1	83.5	72.7	41.7
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: P967117  
 CATALOG NUMBER: NAV-SB4D-722-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8	4945.8
2.5°	4964.0	5000.3	5062.1	5120.2	5165.5	5209.2	5252.7	5276.3	5283.6	5312.6	5329.0
5°	5022.1	5089.2	5209.2	5321.7	5392.5	5436.1	5466.9	5485.1	5488.7	5497.8	5512.3
7.5°	5129.2	5236.3	5403.4	5515.9	5568.6	5564.9	5552.2	5506.9	5488.7	5472.4	5476.0
10°	5279.9	5421.5	5626.7	5704.7	5672.0	5584.9	5472.4	5339.8	5278.1	5218.2	5200.0
12.5°	5466.9	5646.6	5848.2	5844.5	5683.0	5459.7	5198.2	4994.8	4866.0	4773.3	4751.6
15°	5693.9	5900.8	6055.2	5931.8	5577.6	5176.5	4793.3	4528.2	4412.0	4310.3	4299.5
17.5°	5928.1	6149.6	6220.4	5904.5	5312.6	4757.0	4323.0	4114.2	3999.9	3945.4	3961.7
20°	6156.9	6376.5	6318.5	5748.3	4909.5	4281.3	3894.6	3780.2	3756.6	3769.3	3763.8
22.5°	6398.4	6594.4	6338.4	5447.0	4395.7	3794.8	3582.3	3585.9	3638.5	3676.7	3685.8
25°	6645.3	6777.8	6285.8	5011.2	3843.7	3437.0	3384.3	3442.5	3546.0	3620.4	3640.4
27.5°	6883.1	6941.2	6171.4	4472.0	3369.9	3181.0	3190.1	3309.9	3466.0	3569.6	3595.0
30°	7151.8	7086.4	5951.7	3865.5	3041.2	2961.3	3037.6	3177.4	3333.5	3426.2	3447.9
32.5°	7455.0	7211.8	5603.1	3304.5	2808.8	2785.2	2910.5	3001.3	3070.3	3097.5	3112.0
35°	7832.7	7387.9	5156.5	2910.5	2600.0	2656.3	2776.1	2730.7	2703.5	2689.0	2703.5
37.5°	8322.9	7625.7	4633.5	2654.4	2431.2	2563.7	2612.7	2471.1	2364.0	2311.3	2324.0
40°	8913.0	7974.3	4130.6	2456.6	2324.0	2483.8	2398.5	2227.8	2091.6	2017.2	2022.6
42.5°	9568.5	8339.3	3707.5	2307.7	2264.1	2418.5	2240.5	2037.2	1817.4	1793.9	1817.4
45°	10256.6	8715.2	3418.9	2193.3	2235.1	2362.1	2149.7	1821.1	1664.9	1761.2	1812.0
47.5°	10944.7	9060.1	3244.5	2108.0	2220.6	2298.6	2069.9	1701.3	1590.5	1730.3	1795.7
50°	11710.9	9368.8	3166.5	2046.2	2204.2	2273.2	1950.0	1670.4	1512.4	1605.0	1674.0
52.5°	12471.7	9608.5	3108.4	1984.5	2180.6	2253.3	1891.9	1634.1	1418.0	1423.5	1461.5
55°	13230.6	9764.6	3044.9	1902.8	2127.9	2209.7	1886.4	1594.2	1347.3	1321.8	1340.0
57.5°	14040.4	9853.5	2966.8	1812.0	2037.2	2098.9	1881.0	1563.2	1325.4	1283.7	1289.1
60°	14864.8	9984.2	2865.1	1701.3	1915.5	1966.4	1868.3	1552.4	1312.7	1241.9	1247.3
62.5°	15603.7	10029.6	2743.4	1595.9	1759.4	1835.7	1841.1	1543.3	1278.2	1156.6	1156.6
65°	16088.5	9833.5	2531.0	1476.1	1590.5	1701.3	1788.4	1512.4	1216.5	1094.8	1094.8
67.5°	16068.5	9274.3	2198.7	1321.8	1427.1	1552.4	1712.2	1459.8	1142.1	1018.5	1024.1
70°	15320.5	8170.4	1777.6	1142.1	1247.3	1392.6	1614.1	1381.7	1053.1	935.1	946.0
72.5°	13139.9	6394.8	1290.9	931.4	1038.5	1227.3	1487.0	1287.3	962.3	860.6	855.2
75°	9386.9	4047.1	875.1	715.3	808.0	1040.4	1329.0	1176.5	878.7	864.3	815.2
77.5°	4795.2	1933.7	579.2	523.0	562.8	820.7	1116.6	1051.2	891.4	713.5	635.5
80°	1559.6	713.5	364.9	355.9	374.0	546.5	864.3	862.4	675.4	484.8	428.4
82.5°	497.5	306.9	237.8	228.8	219.7	343.2	602.8	682.6	455.7	306.9	305.0
85°	197.9	183.4	139.8	128.9	92.6	161.6	315.9	453.9	339.5	221.5	226.9
87.5°	72.7	72.7	38.1	27.3	20.0	54.4	85.4	136.2	194.2	114.4	112.5
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)