

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: STREETWORKS

Report Number: P157409

Luminaire Tested: **VST-E11-LED-E-U-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157409
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E11-LED-E-U-5MQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32138.5 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

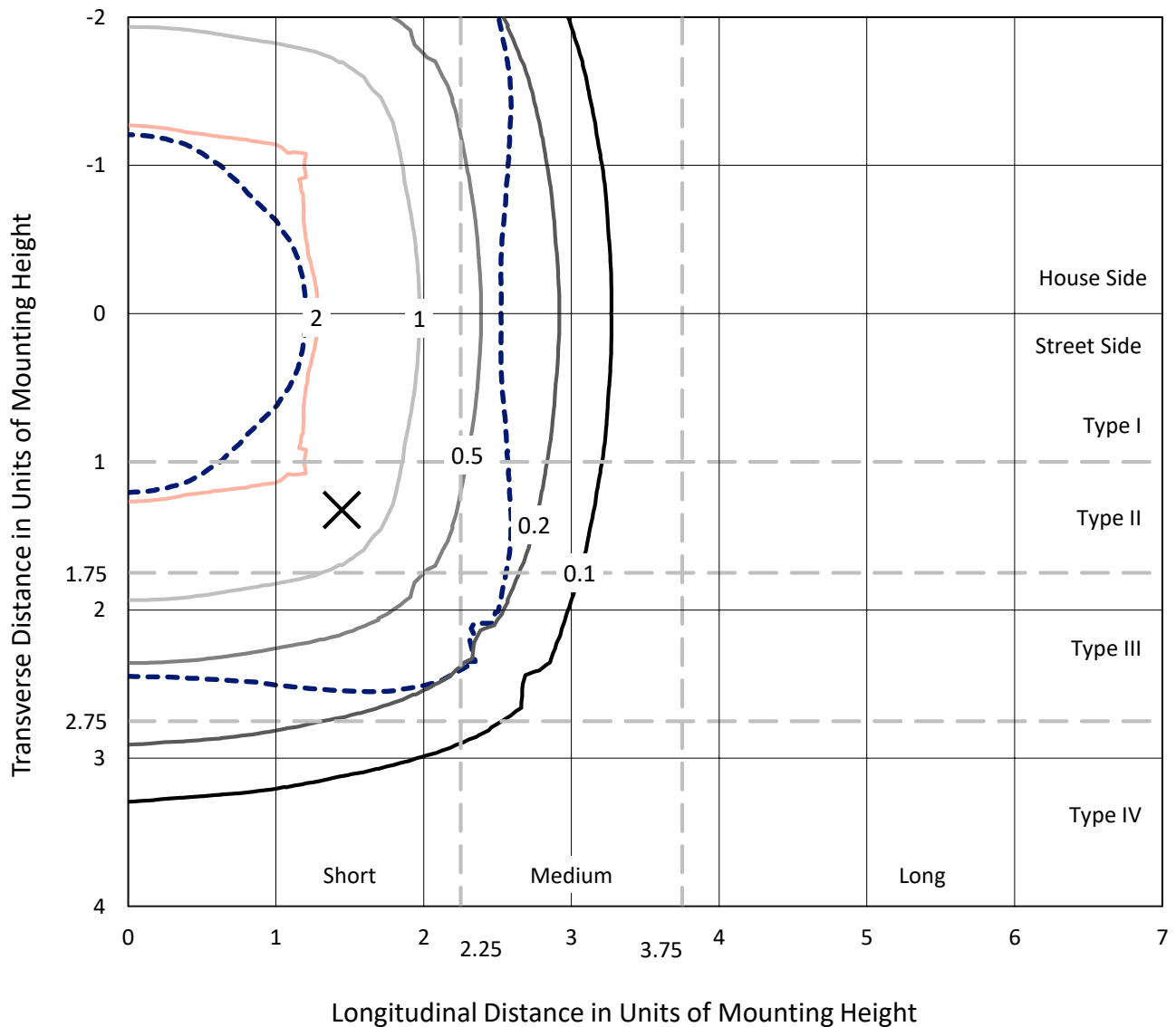
Input Watts (W): 269.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P157409
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Iso-Footcandle Lines of Horizontal Illumination

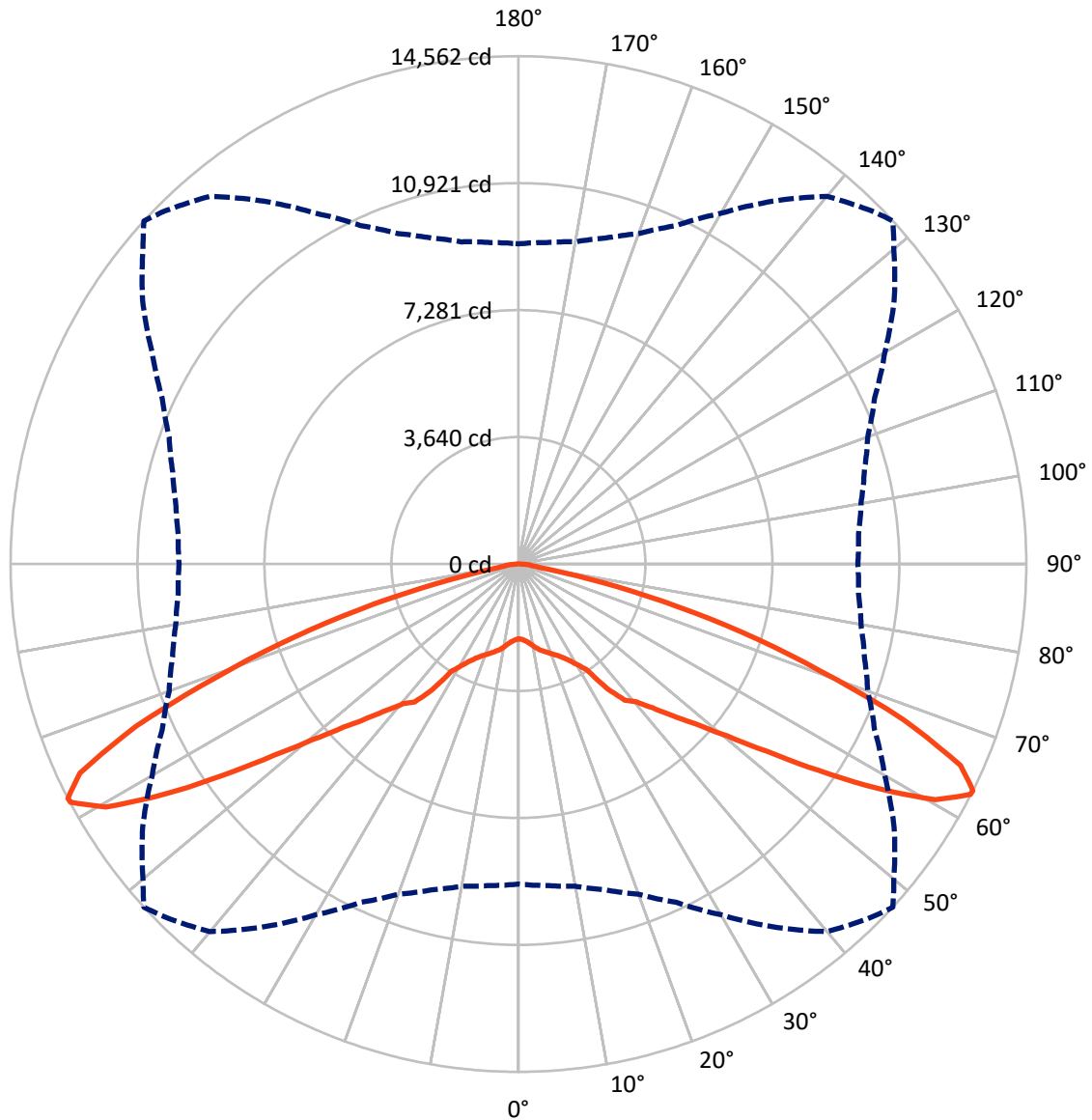
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P157409
CATALOG NUMBER: VST-E11-LED-E-U-5MQ-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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CATALOG NUMBER: VST-E11-LED-E-U-5MQ-7030

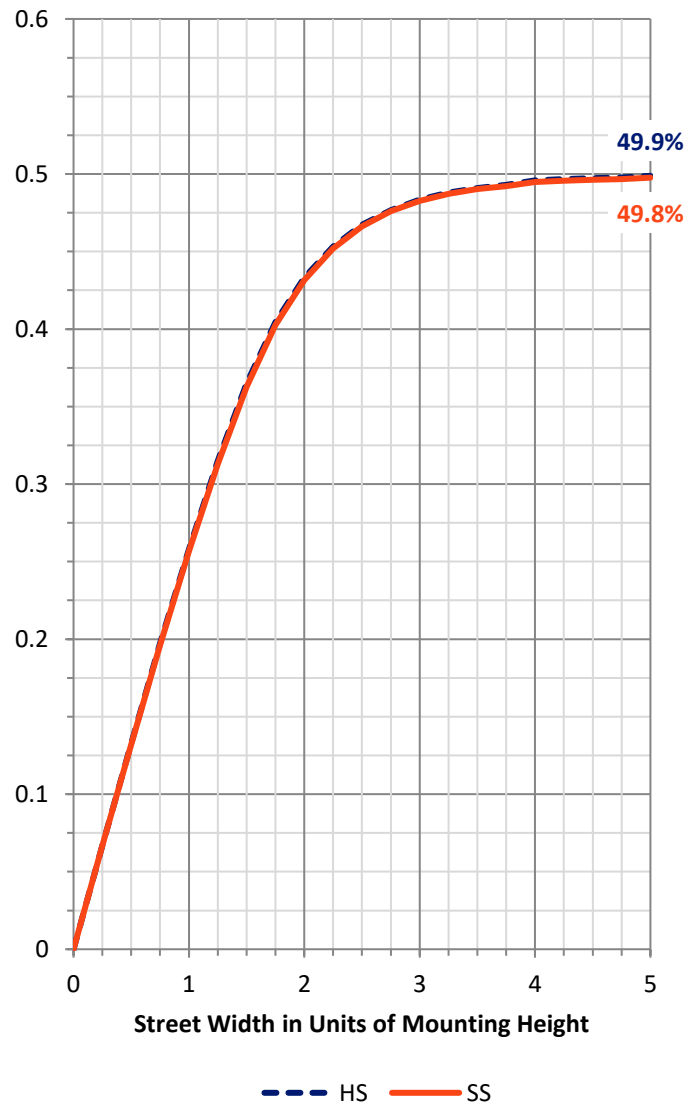
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16069.2	0.0	16069.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16069.2	0.0	16069.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	32138.5	0.0	32138.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.5	0.7
10°-20°	732.4	2.3
20°-30°	1400.9	4.4
30°-40°	2679.7	8.3
40°-50°	4636.8	14.4
50°-60°	8327.5	25.9
60°-70°	10126.4	31.5
70°-80°	3657.1	11.4
80°-90°	362.2	1.1
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°	32138.5	100.0
0°-180°	32138.5	100.0



REPORT NUMBER: P157409

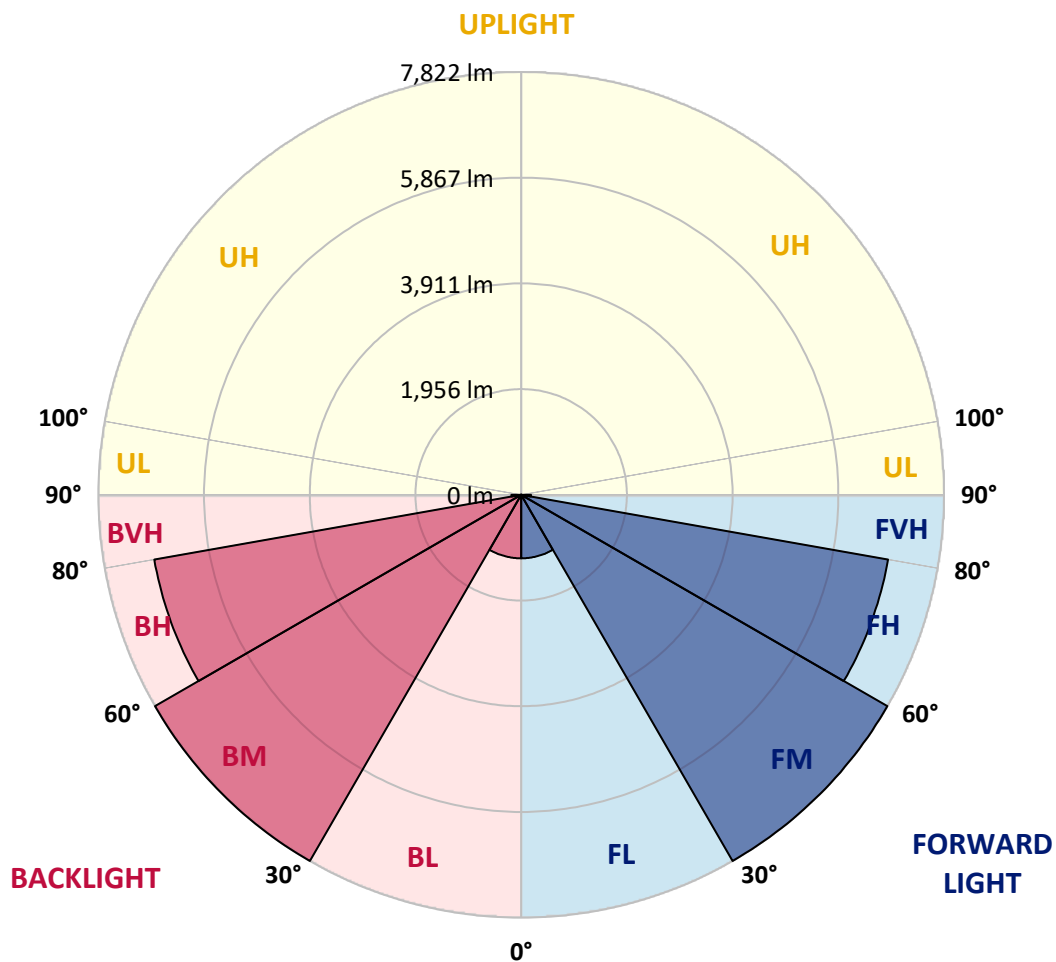
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1174.4	3.7			
FM	(30°-60°)	7822.0	24.3			
FH	(60°-80°)	6891.8	21.4			G3/7500
FVH	(80°-90°)	181.1	0.6			G2/225
BL	(0°-30°)	1174.4	3.7	B3/2500		
BM	(30°-60°)	7822.0	24.3	B4/8500		
BH	(60°-80°)	6891.8	21.4	B5		G3/7500
BVH	(80°-90°)	181.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





REPORT NUMBER: P157409

CATALOG NUMBER: VST-E11-LED-E-U-5MQ-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0
2.5°	2160.1	2156.1	2158.1	2160.1	2158.1	2156.1	2156.1	2156.1	2160.1	2156.1	2166.1
5°	2202.3	2198.3	2200.3	2200.3	2200.3	2196.2	2196.2	2196.2	2194.2	2196.2	2218.3
7.5°	2282.6	2276.6	2274.6	2278.6	2274.6	2272.6	2270.6	2270.6	2266.6	2266.6	2294.7
10°	2379.1	2371.1	2375.1	2377.1	2371.1	2367.0	2367.0	2367.0	2361.0	2359.0	2395.2
12.5°	2485.6	2481.6	2481.6	2477.6	2475.5	2471.5	2469.5	2471.5	2463.5	2463.5	2499.7
15°	2588.1	2580.0	2582.0	2576.0	2572.0	2568.0	2566.0	2564.0	2559.9	2559.9	2582.0
17.5°	2682.5	2676.5	2674.5	2668.4	2662.4	2656.4	2652.4	2650.4	2644.3	2644.3	2664.4
20°	2781.0	2774.9	2770.9	2760.9	2750.8	2744.8	2736.8	2732.7	2724.7	2726.7	2748.8
22.5°	2893.5	2883.4	2875.4	2867.4	2849.3	2837.2	2827.2	2819.1	2815.1	2815.1	2845.3
25°	3044.2	3038.2	3026.1	3000.0	2977.9	2959.8	2943.7	2935.7	2927.7	2923.6	2969.8
27.5°	3229.1	3223.0	3207.0	3180.8	3150.7	3120.6	3102.5	3088.4	3078.4	3072.3	3138.6
30°	3474.2	3464.2	3450.1	3407.9	3381.8	3335.6	3315.5	3295.4	3273.3	3279.3	3357.7
32.5°	3954.4	3940.4	3896.2	3850.0	3769.6	3707.3	3643.0	3594.8	3548.5	3542.5	3626.9
35°	4390.5	4384.4	4376.4	4344.3	4314.1	4275.9	4245.8	4195.6	4153.4	4143.3	4380.4
37.5°	4625.6	4639.6	4627.6	4623.6	4623.6	4641.6	4697.9	4754.2	4794.4	4818.5	4951.1
40°	4985.2	4985.2	4971.2	4963.1	4947.1	4971.2	4995.3	5037.5	5055.6	5057.6	5192.2
42.5°	5393.2	5395.2	5381.1	5357.0	5348.9	5371.0	5403.2	5443.4	5467.5	5473.5	5630.3
45°	5847.3	5841.2	5829.2	5821.1	5827.2	5847.3	5885.4	5963.8	6000.0	6028.1	6198.9
47.5°	6339.6	6379.8	6345.6	6351.6	6351.6	6413.9	6500.3	6564.6	6622.9	6677.1	6858.0
50°	6984.6	6990.6	6996.6	7014.7	7026.8	7109.2	7217.7	7294.0	7378.4	7448.7	7744.1
52.5°	7846.6	7834.5	7864.7	7884.8	7953.1	7997.3	8178.1	8274.6	8391.1	8481.6	8913.6
55°	8877.4	8871.4	8915.6	8931.7	9022.1	9130.6	9331.5	9542.5	9741.4	9851.9	10442.7
57.5°	9616.8	9632.9	9709.3	9815.8	9992.6	10223.7	10523.1	10989.2	11367.0	11487.6	12138.6
60°	9779.6	9831.9	9946.4	10159.4	10462.8	10892.8	11481.5	12194.9	12886.1	13117.2	13728.0
62.5°	9323.5	9383.8	9552.5	9807.7	10203.6	10840.6	11690.5	12697.2	13724.0	14238.4	14545.8
63°	9178.8	9253.2	9379.7	9675.1	10077.0	10705.9	11610.1	12695.2	13760.2	14320.8	14561.9
65°	8499.6	8513.7	8702.6	8998.0	9450.1	10103.1	11015.4	12269.2	13450.7	14097.7	13931.0
67.5°	7314.1	7372.4	7531.1	7828.5	8268.6	8947.7	9938.3	11097.8	12136.6	12653.0	11907.5
70°	5909.6	5905.5	6102.5	6341.6	6729.4	7326.2	8194.2	9241.1	10064.9	10440.7	9192.9
72.5°	4221.7	4117.2	4261.9	4527.1	4844.6	5320.8	6008.0	6821.8	7559.3	7884.8	6721.3
75°	1923.0	1894.8	2023.4	2286.7	2608.2	3032.1	3596.8	4300.1	5007.4	5389.1	4282.0
77.5°	647.0	655.1	705.3	799.7	972.5	1185.5	1537.2	1987.3	2559.9	2937.7	2009.4
80°	434.0	446.1	462.2	476.2	496.3	528.5	604.8	721.4	898.2	1087.1	635.0
82.5°	355.7	369.7	405.9	422.0	434.0	444.1	450.1	458.1	458.1	462.2	401.9
85°	255.2	279.3	327.5	357.7	369.7	377.8	387.8	399.9	381.8	365.7	311.5
87.5°	88.4	120.6	176.8	194.9	209.0	211.0	225.0	249.2	237.1	192.9	94.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0	2146.0
2.5°	2156.1	2154.0	2156.1	2158.1	2158.1	2158.1	2160.1	2162.1	2162.1
5°	2196.2	2198.3	2196.2	2198.3	2198.3	2200.3	2200.3	2204.3	2204.3
7.5°	2264.6	2268.6	2266.6	2270.6	2270.6	2274.6	2272.6	2278.6	2278.6
10°	2357.0	2361.0	2365.0	2367.0	2365.0	2369.0	2373.1	2375.1	2373.1
12.5°	2461.5	2463.5	2461.5	2465.5	2465.5	2469.5	2469.5	2475.5	2475.5
15°	2557.9	2555.9	2553.9	2559.9	2564.0	2566.0	2570.0	2576.0	2570.0
17.5°	2644.3	2646.3	2642.3	2648.4	2656.4	2662.4	2666.4	2674.5	2672.5
20°	2730.7	2726.7	2730.7	2740.8	2748.8	2756.9	2764.9	2777.0	2774.9
22.5°	2815.1	2819.1	2829.2	2837.2	2851.3	2863.4	2873.4	2889.5	2895.5
25°	2933.7	2933.7	2949.8	2959.8	2979.9	2996.0	3018.1	3036.2	3046.2
27.5°	3084.4	3084.4	3102.5	3124.6	3154.7	3182.8	3207.0	3231.1	3227.0
30°	3289.3	3299.4	3315.5	3343.6	3383.8	3417.9	3450.1	3474.2	3476.2
32.5°	3558.6	3570.7	3618.9	3691.2	3775.6	3839.9	3888.1	3946.4	3954.4
35°	4169.4	4199.6	4261.9	4320.1	4354.3	4392.5	4416.6	4418.6	4422.6
37.5°	4812.4	4760.2	4712.0	4667.8	4647.7	4643.7	4643.7	4651.7	4655.7
40°	5047.5	5021.4	4999.3	4971.2	4979.2	4977.2	4991.3	5003.3	5011.4
42.5°	5449.4	5429.3	5409.2	5373.1	5393.2	5387.1	5407.2	5425.3	5435.3
45°	6010.0	5947.7	5903.5	5845.3	5865.4	5853.3	5853.3	5875.4	5879.4
47.5°	6628.9	6556.6	6466.2	6393.8	6369.7	6347.6	6367.7	6367.7	6345.6
50°	7370.4	7284.0	7177.5	7060.9	7020.7	6998.6	7006.7	7016.7	6954.4
52.5°	8377.1	8280.6	8129.9	7953.1	7914.9	7896.8	7892.8	7878.7	7862.7
55°	9741.4	9560.6	9375.7	9142.6	9072.3	9052.2	9054.2	9038.1	9076.3
57.5°	11350.9	11085.7	10659.7	10376.4	10207.6	10143.3	10085.0	10060.9	10062.9
60°	12944.4	12403.8	11766.9	11272.6	10918.9	10693.9	10517.0	10418.6	10390.5
62.5°	13971.2	13121.2	12164.7	11363.0	10782.3	10410.5	10131.2	9954.4	9898.2
63°	14051.5	13151.3	12128.6	11268.6	10657.7	10267.9	9974.5	9791.7	9731.4
65°	13876.7	12847.9	11656.4	10631.6	9962.5	9530.4	9213.0	9040.2	8993.9
67.5°	12518.4	11662.4	10448.7	9389.8	8714.6	8276.6	7912.9	7748.1	7695.9
70°	10183.5	9596.8	8602.1	7697.9	7069.0	6647.0	6279.3	6142.6	6140.6
72.5°	7549.2	6787.7	6194.9	5531.8	4983.2	4647.7	4328.2	4175.5	4099.1
75°	4993.3	4177.5	3514.4	2955.8	2409.2	2107.8	1748.2	1593.4	1503.0
77.5°	2515.7	1864.7	1336.2	926.3	719.4	590.8	540.5	514.4	512.4
80°	837.9	628.9	540.5	506.4	496.3	498.3	492.3	482.2	470.2
82.5°	464.2	488.3	492.3	478.2	478.2	470.2	462.2	424.0	403.9
85°	397.9	438.0	442.1	434.0	432.0	420.0	405.9	353.6	323.5
87.5°	249.2	287.3	281.3	251.2	277.3	259.2	245.1	158.7	116.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)