

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: P883491

Luminaire Tested: **NAV-SB3D-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25454 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

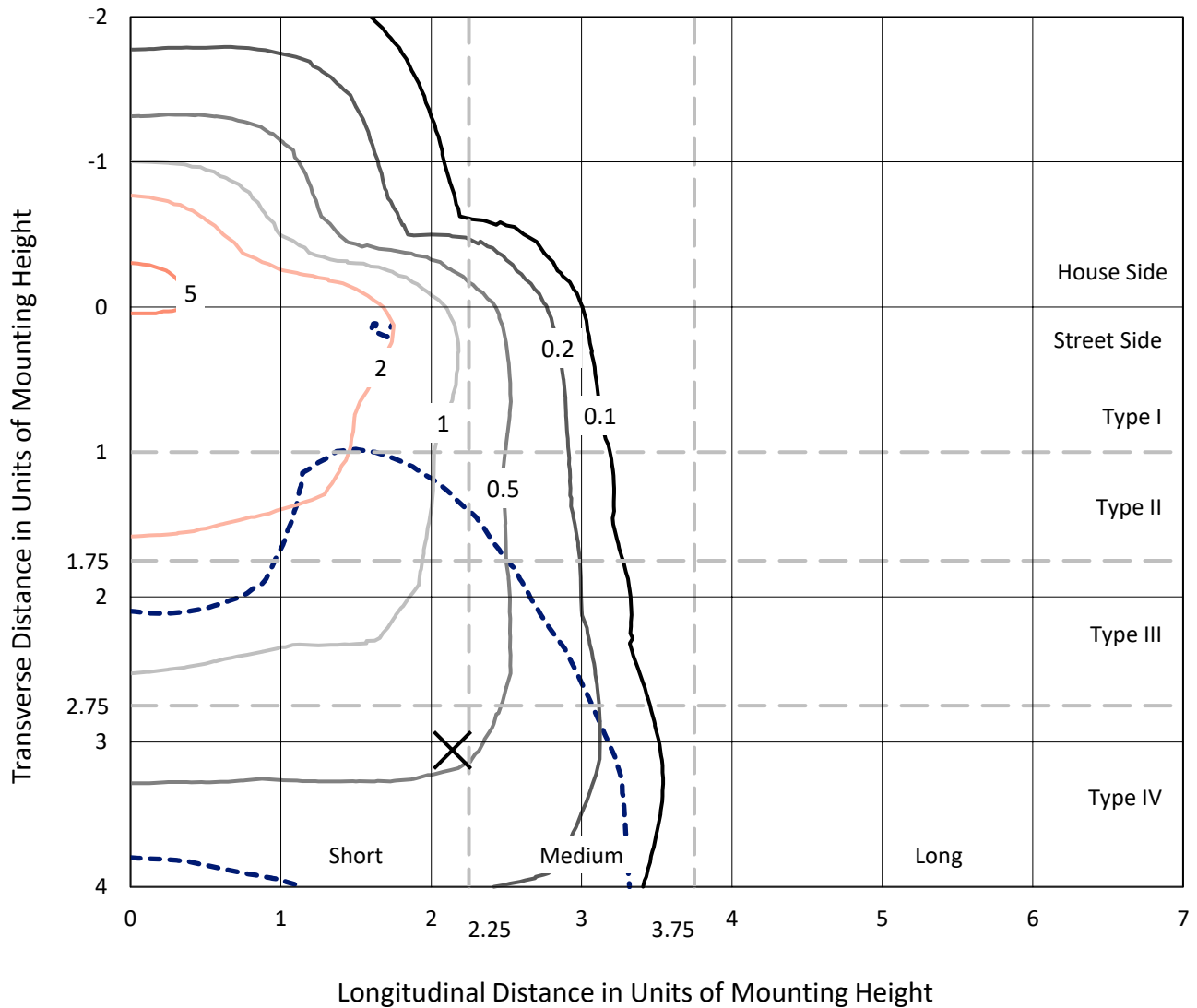
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

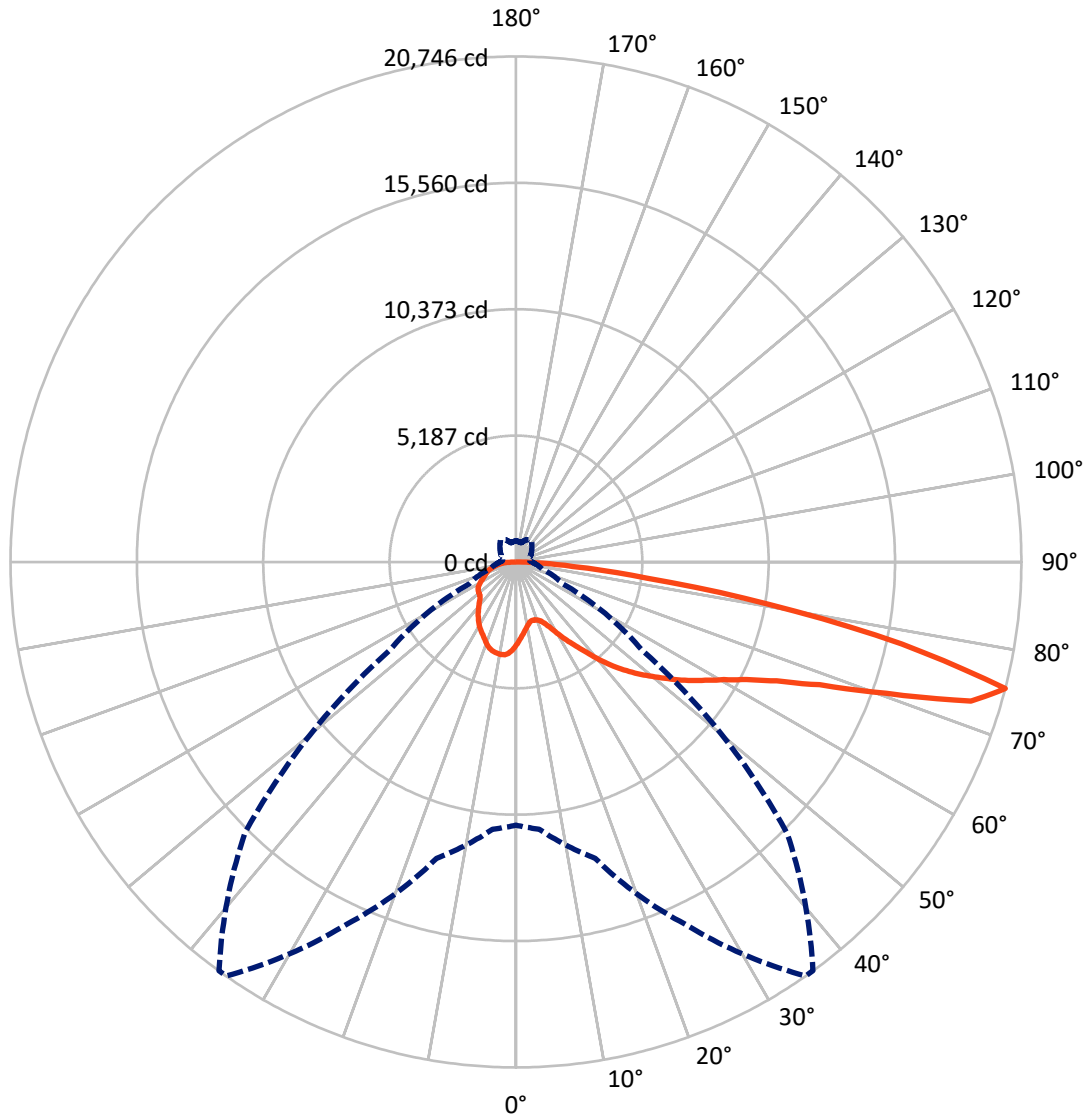
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6057.4	0.0	6057.4
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	19396.6	0.0	19396.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	25454.0	0.0	25454.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.1	1.3
10°-20°	926.3	3.6
20°-30°	1555.5	6.1
30°-40°	2417.5	9.5
40°-50°	3588.3	14.1
50°-60°	4953.8	19.5
60°-70°	6010.1	23.6
70°-80°	4966.9	19.5
80°-90°	714.4	2.8
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°	25454.0	100.0
0°-180°	25454.0	100.0

Coefficient of Utilization



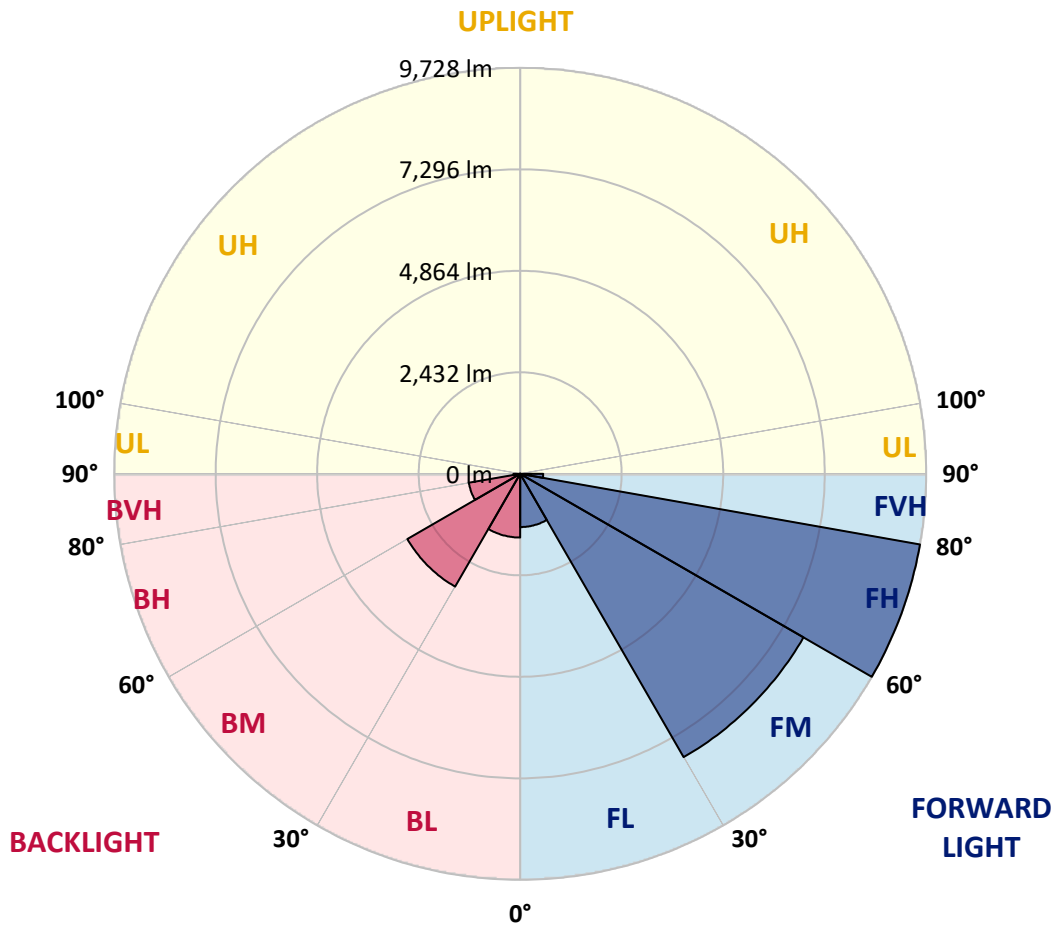
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1276.5	5.0			
FM (30°-60°)	7838.5	30.8			
FH (60°-80°)	9728.1	38.2			G4/12000
FVH (80°-90°)	553.5	2.2			G4/750
BL (0°-30°)	1526.5	6.0	B3/2500		
BM (30°-60°)	3121.2	12.3	B3/5000		
BH (60°-80°)	1248.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	160.9	0.6			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9
2.5°	3127.7	3147.0	3155.2	3151.1	3171.8	3169.0	3197.9	3233.7	3283.2	3331.4	3401.5
5°	2886.9	2907.6	2925.4	2942.0	2981.9	2994.2	3039.7	3108.5	3199.3	3291.5	3407.1
7.5°	2662.6	2680.5	2708.0	2738.3	2805.7	2818.1	2893.8	3001.1	3127.7	3262.6	3422.2
10°	2479.6	2497.5	2526.4	2560.8	2644.7	2659.9	2756.2	2899.3	3064.4	3235.1	3438.7
12.5°	2401.2	2406.7	2423.2	2457.6	2530.5	2540.2	2646.1	2809.9	3002.5	3214.4	3463.5
15°	2397.0	2408.1	2409.4	2427.3	2487.9	2492.0	2589.7	2752.1	2964.0	3210.3	3500.6
17.5°	2438.3	2446.6	2434.2	2445.2	2496.1	2503.0	2580.1	2724.5	2951.6	3228.2	3563.9
20°	2548.4	2555.3	2518.1	2503.0	2540.2	2545.7	2621.3	2742.4	2964.0	3265.3	3650.6
22.5°	2782.3	2786.5	2695.6	2633.7	2636.5	2639.2	2705.3	2815.4	3012.1	3332.7	3760.7
25°	3147.0	3144.2	2999.7	2880.0	2811.2	2796.1	2840.1	2933.7	3093.3	3422.2	3902.4
27.5°	3573.6	3552.9	3408.4	3229.5	3079.6	3057.5	3047.9	3087.8	3208.9	3540.5	4075.8
30°	4055.2	4035.9	3880.4	3646.5	3438.7	3402.9	3312.1	3291.5	3380.9	3701.5	4316.6
32.5°	4583.6	4571.2	4385.4	4101.9	3824.0	3782.7	3630.0	3574.9	3645.1	3945.1	4652.4
35°	5026.6	5015.6	4861.5	4569.8	4229.9	4179.0	4023.5	3961.6	3997.4	4257.4	5091.3
37.5°	5427.1	5421.6	5289.5	5059.7	4708.8	4646.9	4472.1	4451.5	4444.6	4668.9	5623.8
40°	5798.6	5784.8	5647.2	5526.1	5266.1	5209.7	5055.5	5037.7	4985.4	5175.3	6226.5
42.5°	6210.0	6174.3	5974.7	5918.3	5848.1	5801.3	5709.2	5711.9	5596.3	5746.3	6865.0
45°	6545.8	6525.1	6320.1	6287.1	6362.8	6343.5	6423.3	6444.0	6219.7	6344.9	7528.3
47.5°	6906.3	6887.0	6713.7	6690.3	6895.3	6900.8	7182.9	7189.8	6827.9	6966.8	8192.9
50°	7350.8	7323.2	7151.2	7180.1	7409.9	7430.6	7946.6	7899.8	7387.9	7598.4	8852.0
52.5°	7643.9	7660.4	7623.2	7670.0	7983.7	8003.0	8697.9	8578.2	7942.5	8221.8	9498.7
55°	7859.9	7892.9	8008.5	8115.8	8589.2	8608.5	9406.6	9223.5	8402.0	8799.7	10107.0
57.5°	8137.9	8091.1	8307.1	8516.3	9164.4	9215.3	10095.9	9845.5	8809.4	9297.8	10523.9
60°	8536.9	8503.9	8671.8	8981.4	9808.4	9889.5	10825.2	10405.6	9108.0	9692.8	10605.1
62.5°	9346.0	9263.4	9289.6	9563.4	10620.2	10727.5	11648.1	10894.0	9256.6	9846.9	10170.2
65°	10555.5	10413.8	10281.7	10471.6	11763.7	11869.6	12576.9	11278.0	9201.5	9548.3	9015.8
67.5°	12078.8	11938.4	11776.1	11955.0	13448.0	13531.9	13723.2	11494.0	8768.1	8397.9	6975.1
70°	13335.1	13282.8	13476.9	14213.0	16138.1	16140.8	15192.8	11315.1	7580.6	5954.1	4035.9
72.5°	13168.6	13137.0	14159.4	16435.3	19528.6	19455.7	16583.9	9961.1	5106.5	2686.0	1512.3
75°	10803.2	11008.3	12592.1	16395.4	20746.4	20736.8	15732.2	6332.5	2112.2	1113.2	781.6
77.5°	5793.1	6117.8	8175.0	12104.9	16195.9	16439.4	11060.5	2215.4	906.8	712.8	540.8
80°	1889.3	2172.8	3258.4	6163.2	10523.9	10478.5	4740.4	869.7	620.6	505.0	374.3
82.5°	802.2	835.3	1455.8	2910.3	5400.9	5317.0	1509.5	499.5	436.2	345.4	231.2
85°	313.7	350.9	642.6	1345.8	2339.3	2288.3	544.9	247.7	279.3	225.7	137.6
87.5°	103.2	125.2	229.8	461.0	727.9	701.8	133.5	85.3	121.1	103.2	49.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9	3391.9
2.5°	3420.8	3442.8	3469.0	3507.5	3540.5	3568.0	3596.9	3614.8	3621.7	3642.4	3641.0
5°	3445.6	3493.7	3558.4	3621.7	3683.6	3720.8	3753.8	3770.3	3785.5	3796.5	3799.2
7.5°	3486.9	3548.8	3650.6	3733.2	3785.5	3815.7	3837.8	3832.2	3837.8	3840.5	3844.6
10°	3522.6	3609.3	3730.4	3808.9	3848.8	3850.1	3844.6	3825.4	3815.7	3817.1	3819.9
12.5°	3565.3	3661.6	3792.3	3858.4	3869.4	3839.1	3815.7	3782.7	3770.3	3764.8	3762.1
15°	3623.1	3733.2	3859.8	3884.5	3857.0	3818.5	3778.6	3724.9	3697.4	3675.4	3682.3
17.5°	3693.3	3814.4	3912.1	3894.2	3835.0	3771.7	3707.0	3625.8	3569.4	3546.0	3547.4
20°	3791.0	3899.7	3952.0	3873.5	3784.1	3687.8	3577.7	3478.6	3426.3	3402.9	3400.2
22.5°	3909.3	4013.9	3990.5	3837.8	3711.2	3557.0	3419.4	3346.5	3320.4	3303.9	3306.6
25°	4051.0	4140.5	4018.0	3785.5	3591.4	3383.7	3277.7	3254.3	3241.9	3229.5	3229.5
27.5°	4235.4	4283.6	4038.7	3708.4	3404.3	3199.3	3160.7	3164.9	3160.7	3140.1	3144.2
30°	4479.0	4469.4	4057.9	3583.2	3189.6	3032.8	3035.5	3053.4	3056.2	3042.4	3049.3
32.5°	4799.6	4701.9	4067.5	3420.8	2984.6	2886.9	2889.7	2908.9	2922.7	2899.3	2910.3
35°	5187.6	4973.0	4052.4	3217.2	2826.4	2747.9	2727.3	2732.8	2736.9	2714.9	2730.0
37.5°	5640.4	5277.1	3985.0	2991.5	2695.6	2611.7	2567.7	2530.5	2508.5	2487.9	2501.6
40°	6137.1	5608.7	3861.1	2771.3	2549.8	2467.2	2401.2	2331.0	2256.7	2229.2	2241.6
42.5°	6657.2	5950.0	3711.2	2560.8	2381.9	2314.5	2244.3	2142.5	2031.0	1974.6	1981.5
45°	7196.6	6299.5	3563.9	2353.0	2209.9	2181.0	2099.8	1977.4	1856.3	1784.7	1779.2
47.5°	7725.0	6629.7	3347.9	2143.9	2048.9	2080.6	2017.3	1904.4	1769.6	1656.7	1644.4
50°	8230.0	6939.3	2994.2	1931.9	1918.2	2050.3	1989.7	1827.4	1673.3	1528.8	1516.4
52.5°	8730.9	7189.8	2541.5	1739.3	1848.0	2042.0	1954.0	1775.1	1586.6	1435.2	1418.7
55°	9156.1	7319.1	2105.3	1574.2	1746.2	1971.9	1911.3	1713.2	1464.1	1303.1	1289.3
57.5°	9398.3	7214.5	1742.1	1411.8	1605.8	1856.3	1838.4	1581.1	1318.2	1194.4	1177.9
60°	9293.7	6790.7	1444.8	1270.1	1472.4	1731.0	1711.8	1450.3	1206.8	1089.8	1073.3
62.5°	8717.2	5983.0	1209.5	1146.2	1351.3	1603.1	1585.2	1349.9	1121.5	1008.6	990.7
65°	7555.8	4867.0	1026.5	1043.0	1228.8	1449.0	1475.1	1265.9	1054.0	944.0	926.1
67.5°	5762.8	3525.4	883.4	953.6	1109.1	1297.6	1373.3	1205.4	997.6	893.0	876.5
70°	3284.6	2002.1	762.3	866.9	1003.1	1157.2	1294.8	1157.2	937.1	850.4	839.4
72.5°	1245.3	919.2	659.1	780.2	901.3	1038.9	1208.2	1081.6	866.9	802.2	791.2
75°	664.6	560.0	554.5	678.4	784.3	923.3	1099.4	1007.3	814.6	847.6	875.2
77.5°	452.7	396.3	463.7	580.7	656.4	795.3	983.9	894.4	705.9	703.2	648.1
80°	313.7	280.7	377.0	467.9	507.8	668.8	858.6	767.8	575.2	536.7	513.3
82.5°	188.5	183.0	282.1	349.5	359.1	516.0	711.4	644.0	470.6	410.1	412.8
85°	103.2	108.7	180.3	205.0	209.2	360.5	557.3	498.1	361.9	304.1	306.9
87.5°	28.9	37.2	66.0	81.2	100.5	187.1	331.6	295.8	181.6	126.6	126.6
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)