

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: P885170

Luminaire Tested: **NAV-SB6B-827-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21026 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

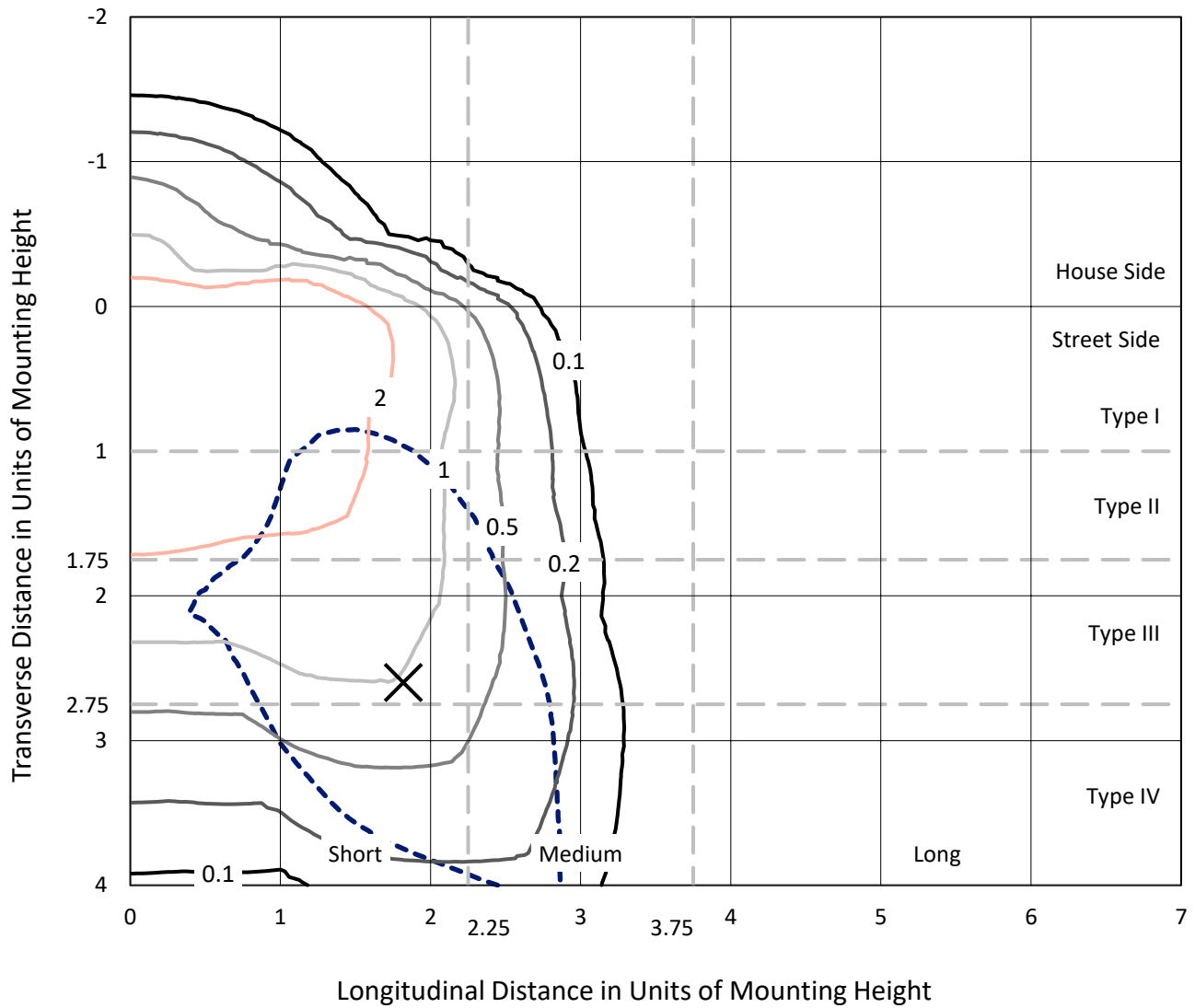
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

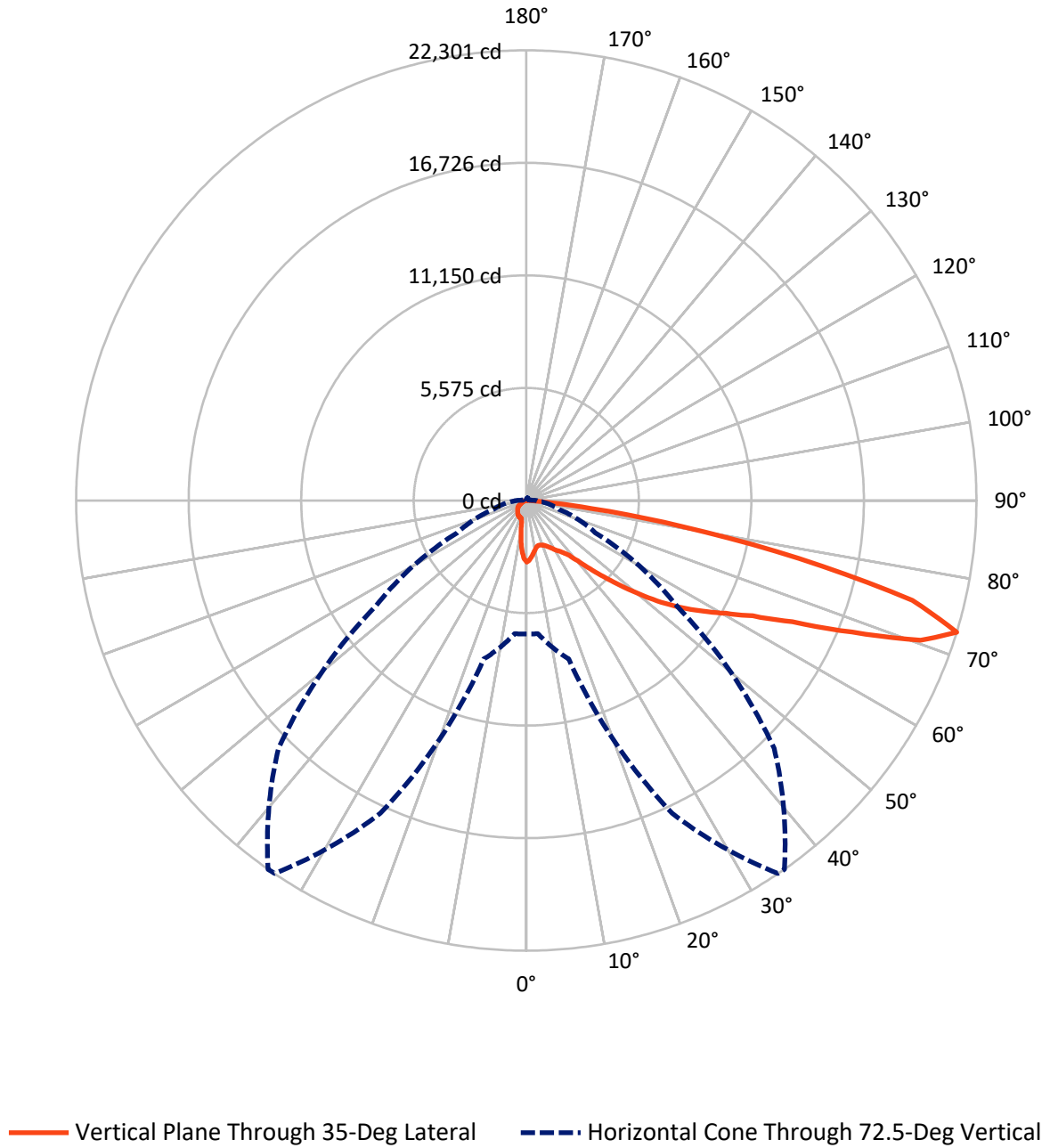
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2366.4	0.0	2366.4
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	18659.6	0.0	18659.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	21026.0	0.0	21026.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.4	1.2
10°-20°	585.8	2.8
20°-30°	951.6	4.5
30°-40°	1587.8	7.6
40°-50°	3004.1	14.3
50°-60°	4773.6	22.7
60°-70°	5905.2	28.1
70°-80°	3670.7	17.5
80°-90°	296.7	1.4
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°	21026.0	100.0
0°-180°	21026.0	100.0

Coefficient of Utilization



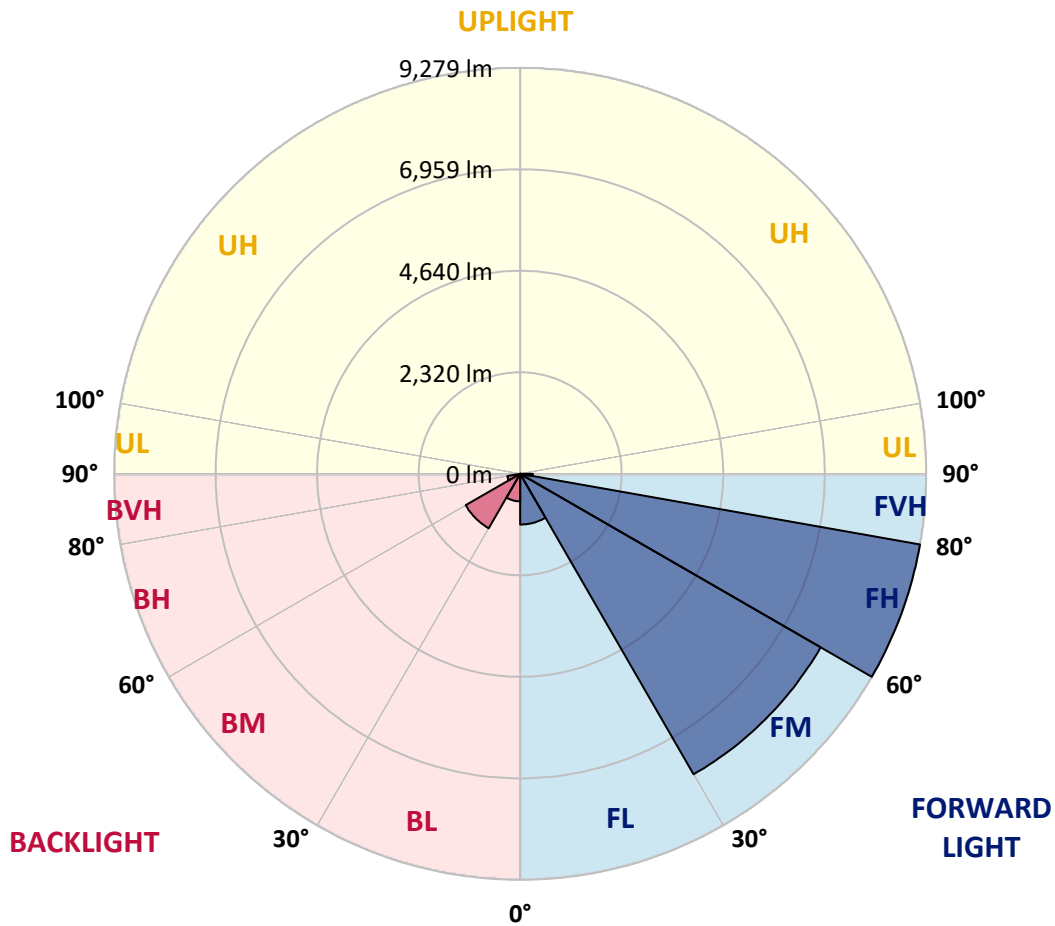
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1159.1	5.5			
FM (30°-60°)	7928.9	37.7			
FH (60°-80°)	9279.0	44.1			G4/12000
FVH (80°-90°)	292.6	1.4			G3/500
BL (0°-30°)	628.8	3.0	B2/1000		
BM (30°-60°)	1436.6	6.8	B2/2500		
BH (60°-80°)	296.9	1.4	B1/500		G1/500
BVH (80°-90°)	4.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4
2.5°	2911.8	2936.4	2941.1	2948.8	2948.8	2958.0	2973.4	2995.0	3030.4	3048.9	3061.2
5°	2683.8	2702.3	2725.4	2743.9	2779.3	2783.9	2844.0	2902.6	2984.2	3045.8	3089.0
7.5°	2454.2	2475.8	2506.6	2551.3	2597.5	2611.4	2702.3	2800.9	2930.3	3045.8	3118.2
10°	2292.5	2294.0	2321.7	2366.4	2440.4	2457.3	2568.2	2708.4	2870.2	3027.3	3146.0
12.5°	2201.6	2212.3	2224.7	2258.6	2329.4	2340.2	2458.9	2623.7	2810.1	3016.6	3178.3
15°	2201.6	2209.3	2217.0	2233.9	2290.9	2300.2	2404.9	2569.8	2779.3	3021.2	3230.7
17.5°	2224.7	2237.0	2230.8	2250.9	2310.9	2317.1	2409.6	2554.4	2777.8	3050.5	3310.8
20°	2280.1	2289.4	2277.1	2289.4	2349.5	2361.8	2457.3	2583.6	2804.0	3101.3	3411.0
22.5°	2368.0	2372.6	2343.3	2352.5	2414.2	2429.6	2540.5	2666.8	2867.1	3182.9	3545.0
25°	2478.9	2488.1	2443.4	2454.2	2512.8	2531.3	2659.1	2791.6	2967.3	3295.4	3716.0
27.5°	2606.8	2611.4	2572.9	2571.3	2646.8	2673.0	2802.4	2945.7	3101.3	3437.2	3931.7
30°	2753.1	2767.0	2730.0	2723.8	2819.4	2840.9	2968.8	3135.2	3298.5	3649.8	4238.3
32.5°	2868.7	2879.4	2857.9	2873.3	2970.3	2987.3	3170.6	3403.3	3608.2	3951.7	4655.8
35°	3035.0	3041.2	2991.9	3019.6	3130.6	3173.7	3446.4	3779.2	3997.9	4330.7	5201.2
37.5°	3637.4	3637.4	3427.9	3290.8	3397.1	3435.6	3823.9	4252.1	4478.6	4839.1	5888.3
40°	4470.9	4457.1	4150.5	3870.1	3856.2	3931.7	4361.5	4848.4	5099.5	5449.2	6661.7
42.5°	5359.9	5338.3	4920.8	4643.5	4597.2	4623.4	4982.4	5583.3	5839.0	6193.3	7493.6
45°	6148.7	6142.5	5760.4	5387.6	5304.4	5387.6	5757.3	6442.9	6626.3	6999.1	8324.0
47.5°	6809.6	6809.6	6530.7	6287.3	6244.2	6293.5	6806.5	7396.6	7379.6	7857.2	9132.9
50°	7570.7	7564.5	7299.5	7194.8	7239.4	7308.8	8014.4	8401.1	8159.2	8700.0	9855.4
52.5°	8103.7	8140.7	8049.8	8032.9	8260.9	8381.0	9240.7	9384.0	8857.1	9499.5	10396.2
55°	8525.9	8569.0	8673.8	8792.4	9231.5	9388.6	10428.5	10316.1	9441.0	10192.8	10707.4
57.5°	9123.6	9062.0	9223.8	9457.9	10168.2	10357.7	11579.4	11195.8	9910.9	10755.2	10741.3
60°	9849.3	9858.5	9886.2	10182.0	11103.3	11346.8	12713.3	12027.7	10212.9	11100.3	10365.4
62.5°	10721.3	10735.1	10792.1	11246.6	12359.0	12588.5	13921.2	12708.7	10351.5	11003.2	9394.8
65°	10661.2	10719.7	11356.0	12910.5	14267.8	14494.3	15330.8	13186.3	10142.0	10115.8	7649.2
67.5°	9712.2	9807.7	10872.2	14897.9	17145.7	17398.4	17034.8	13280.3	9237.6	7866.5	4990.1
70°	8467.3	8501.2	9781.5	16685.1	20478.1	20733.8	18560.0	12246.5	7009.9	4387.7	2235.5
72.5°	6612.4	6620.1	8122.2	17099.5	22286.8	22300.7	17362.9	9091.3	3769.9	1685.5	776.5
75°	4723.6	4677.4	5440.0	13867.2	19607.6	19764.8	13016.8	4264.5	1440.5	796.5	386.7
77.5°	2532.8	2583.6	3078.2	8223.9	13545.2	13813.3	7102.3	1229.4	733.3	542.3	255.7
80°	782.6	825.8	1261.8	3765.3	7672.4	7834.1	2632.9	546.9	511.5	386.7	167.9
82.5°	246.5	255.7	588.5	1582.2	3184.5	3258.4	762.6	309.7	349.7	255.7	98.6
85°	70.9	72.4	261.9	590.1	787.3	802.7	214.1	120.2	200.3	158.7	50.8
87.5°	7.7	24.7	98.6	98.6	69.3	67.8	23.1	26.2	57.0	20.0	9.2
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°	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4	3047.4
2.5°	3053.5	3055.1	3035.0	3001.2	2964.2	2933.4	2894.8	2864.0	2842.5	2836.3	2847.1
5°	3075.1	3064.3	3007.3	2904.1	2780.8	2674.5	2555.9	2461.9	2400.3	2374.1	2383.4
7.5°	3107.5	3076.6	2951.9	2748.5	2512.8	2303.2	2090.6	1925.8	1821.0	1768.6	1776.4
10°	3135.2	3073.6	2859.4	2523.6	2163.0	1845.7	1559.1	1360.4	1249.5	1197.1	1198.6
12.5°	3161.4	3072.0	2739.2	2257.0	1768.6	1380.4	1113.9	1015.3	984.5	973.7	970.6
15°	3210.7	3076.6	2588.3	1952.0	1375.8	1043.0	945.9	944.4	950.6	947.5	945.9
17.5°	3278.5	3081.3	2417.3	1628.4	1061.5	919.8	915.1	929.0	938.2	933.6	932.1
20°	3366.3	3099.8	2235.5	1308.0	912.1	888.9	899.7	912.1	919.8	912.1	910.5
22.5°	3489.5	3132.1	2036.7	1050.7	864.3	870.5	879.7	893.6	901.3	890.5	888.9
25°	3640.5	3182.9	1841.1	913.6	841.2	848.9	862.8	878.2	887.4	876.6	875.1
27.5°	3836.2	3264.6	1660.8	882.8	818.1	822.7	842.7	865.8	878.2	864.3	864.3
30°	4119.7	3398.6	1505.2	896.6	804.2	793.4	821.2	853.5	867.4	855.1	853.5
32.5°	4495.6	3588.1	1409.7	918.2	798.0	759.5	785.7	827.3	850.4	842.7	842.7
35°	4988.6	3876.2	1372.7	942.9	793.4	724.1	742.6	787.3	827.3	835.0	835.0
37.5°	5586.3	4276.8	1383.5	953.7	779.6	694.8	704.1	742.6	795.0	819.6	825.8
40°	6265.8	4743.6	1445.1	942.9	764.2	670.2	671.7	701.0	747.2	784.2	796.5
42.5°	6966.7	5289.0	1559.1	902.8	750.3	648.6	644.0	664.0	694.8	721.0	731.8
45°	7633.8	5849.8	1671.6	847.3	733.3	627.0	616.3	624.0	630.1	640.9	647.1
47.5°	8216.2	6244.2	1639.2	796.5	710.2	602.4	583.9	580.8	562.3	560.8	559.2
50°	8618.3	6330.5	1455.9	745.7	676.3	574.7	545.4	526.9	494.5	479.1	480.7
52.5°	8746.2	5990.0	1189.4	694.8	620.9	537.7	496.1	466.8	426.8	412.9	411.3
55°	8576.7	5322.9	950.6	633.2	543.8	488.4	442.2	403.6	371.3	354.3	354.3
57.5°	8162.3	4474.0	751.8	560.8	462.2	432.9	386.7	348.2	320.5	303.5	300.4
60°	7475.2	3552.7	594.7	474.5	394.4	372.8	325.1	300.4	275.8	255.7	251.1
62.5°	6432.1	2535.9	466.8	375.9	329.7	305.0	277.3	258.8	229.6	201.8	197.2
65°	5019.4	1551.4	360.5	275.8	265.0	252.7	235.7	218.8	183.3	155.6	151.0
67.5°	3166.0	734.9	257.3	208.0	209.5	203.4	195.7	181.8	155.6	131.0	127.9
70°	1394.3	355.9	169.5	158.7	155.6	155.6	161.8	157.1	132.5	109.4	104.8
72.5°	474.5	191.0	126.3	120.2	112.5	110.9	135.6	131.0	106.3	84.7	80.1
75°	248.0	127.9	92.4	86.3	67.8	81.7	107.8	101.7	75.5	55.5	50.8
77.5°	161.8	90.9	63.2	55.5	38.5	53.9	80.1	70.9	44.7	27.7	24.7
80°	101.7	60.1	37.0	26.2	18.5	29.3	43.1	30.8	16.9	6.2	4.6
82.5°	53.9	30.8	13.9	9.2	7.7	9.2	10.8	7.7	3.1	0.0	0.0
85°	21.6	10.8	4.6	3.1	1.5	0.0	3.1	1.5	0.0	0.0	0.0
87.5°	7.7	1.5	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)