

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: P968448

Luminaire Tested: **NAV-SB5B-835-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21209.3 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 182.7
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: 24 FT



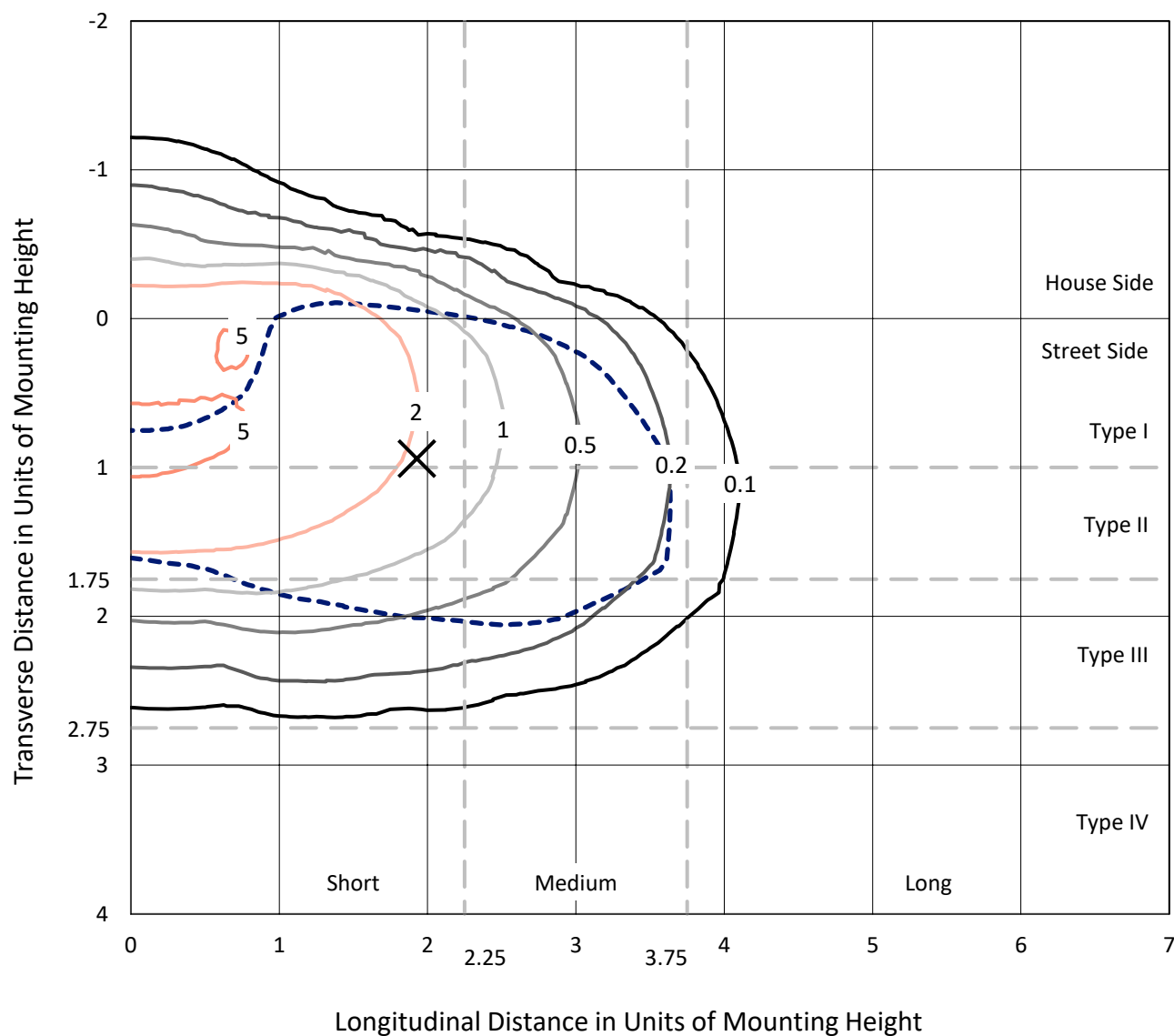
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

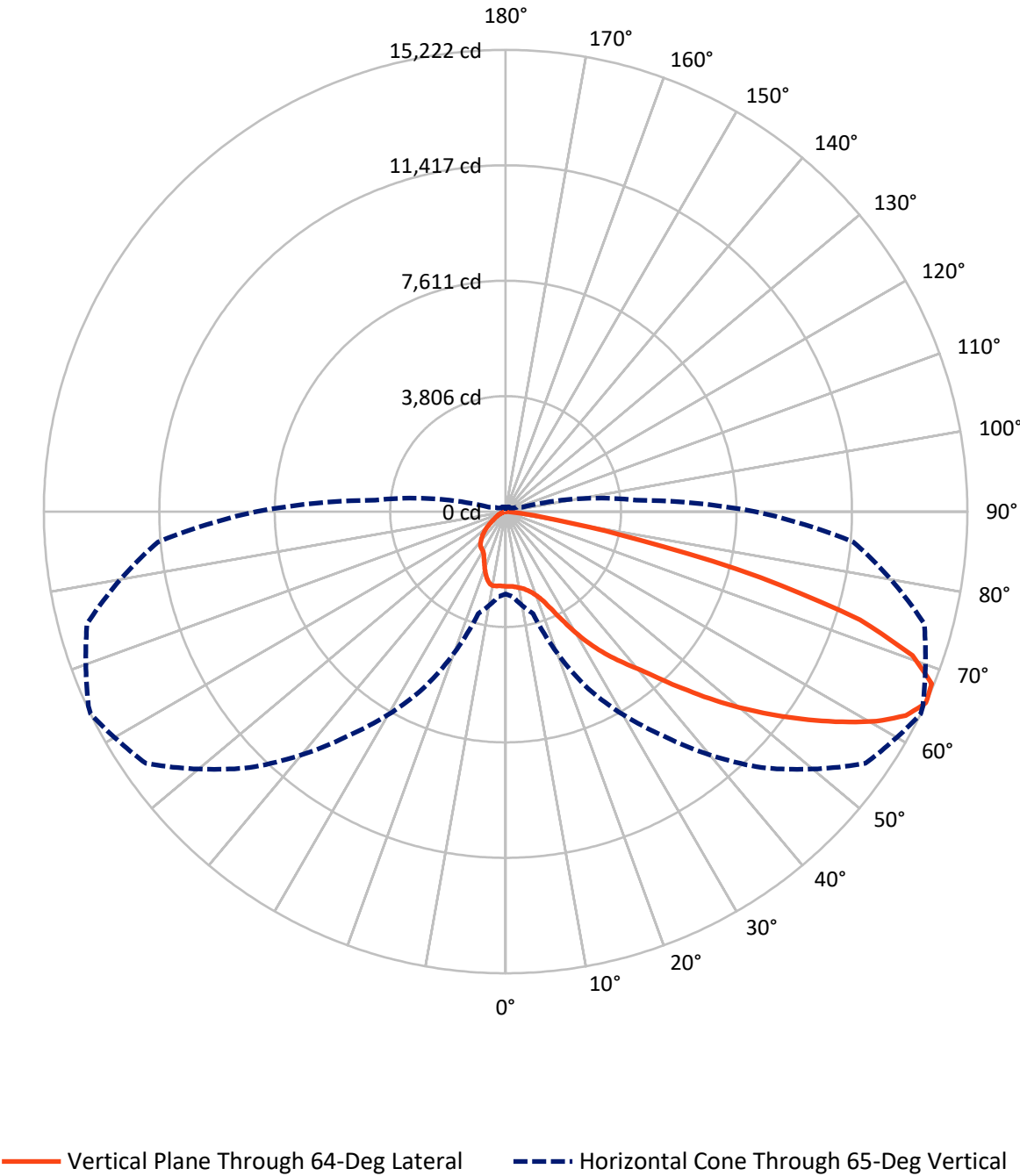


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2836.3	0.0	2836.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	18373.0	0.0	18373.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	21209.3	0.0	21209.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.6	1.1
10°-20°	617.3	2.9
20°-30°	1169.7	5.5
30°-40°	2367.0	11.2
40°-50°	4032.2	19.0
50°-60°	5483.4	25.9
60°-70°	5149.2	24.3
70°-80°	2063.0	9.7
80°-90°	99.9	0.5
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°	21209.3	100.0
0°-180°	21209.3	100.0

Coefficient of Utilization



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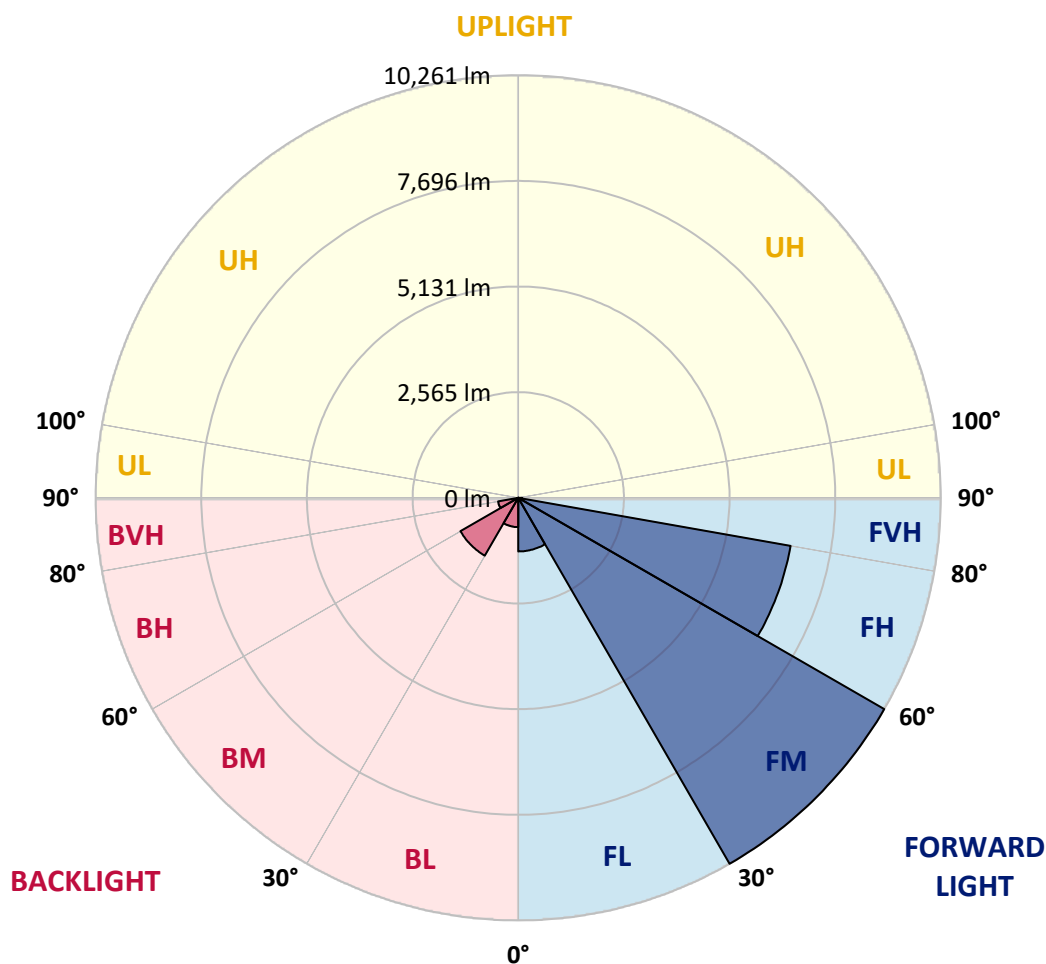
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1302.5	6.1			
FM	(30°-60°)	10261.0	48.4			
FH	(60°-80°)	6714.4	31.7			G3/7500
FVH	(80°-90°)	95.1	0.4			G1/100
BL	(0°-30°)	712.1	3.4	B2/1000		
BM	(30°-60°)	1621.5	7.6	B2/2500		
BH	(60°-80°)	497.8	2.3	B1/500		G1/500
BVH	(80°-90°)	4.9	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9
2.5°	2458.4	2475.4	2471.2	2466.9	2465.4	2468.3	2469.7	2468.3	2468.3	2468.3	2469.7
5°	2411.4	2425.7	2425.7	2435.6	2449.8	2466.9	2479.7	2482.5	2485.3	2489.6	2488.2
7.5°	2321.8	2333.2	2341.7	2374.4	2410.0	2455.5	2493.9	2513.8	2516.6	2532.3	2538.0
10°	2260.7	2274.9	2289.1	2323.3	2374.4	2442.7	2508.1	2556.5	2563.5	2600.5	2617.5
12.5°	2257.9	2272.1	2290.6	2327.6	2387.2	2459.8	2539.3	2609.0	2621.8	2675.9	2711.4
15°	2287.7	2304.8	2321.8	2367.3	2431.3	2519.4	2604.7	2691.5	2704.3	2781.1	2819.5
17.5°	2348.9	2371.6	2384.4	2429.9	2498.1	2596.2	2708.6	2808.1	2819.5	2909.1	2957.4
20°	2469.7	2496.7	2501.0	2538.0	2604.7	2710.0	2843.7	2967.4	2981.5	3083.9	3137.9
22.5°	2719.9	2758.4	2724.2	2742.7	2802.5	2907.6	3052.7	3209.1	3229.0	3345.5	3393.9
25°	3160.7	3214.7	3126.6	3095.3	3120.9	3230.4	3412.3	3610.0	3632.8	3726.6	3750.8
27.5°	4026.6	3956.9	3823.2	3692.5	3615.7	3678.2	3883.0	4127.6	4156.0	4247.0	4218.6
30°	4977.8	4916.6	4736.1	4446.0	4264.0	4254.1	4443.2	4716.2	4748.9	4835.6	4748.9
32.5°	5930.4	5872.1	5675.9	5319.0	5003.4	4847.0	4977.8	5280.7	5297.7	5353.2	5225.2
35°	6867.4	6807.6	6611.5	6246.0	5857.9	5502.4	5476.9	5818.1	5823.7	5882.1	5691.5
37.5°	7810.1	7760.3	7551.3	7193.0	6810.5	6320.0	6082.6	6327.1	6334.2	6391.1	6193.5
40°	8482.6	8503.9	8360.3	8083.0	7754.6	7218.6	6762.2	6868.8	6826.2	6921.4	6803.4
42.5°	9059.9	9102.5	8977.4	8838.1	8647.5	8175.5	7603.9	7585.4	7517.1	7568.4	7446.1
45°	9558.9	9594.4	9482.2	9449.5	9445.2	9113.9	8523.8	8412.9	8317.7	8307.7	8161.3
47.5°	9742.3	9810.6	9859.0	9968.4	10181.6	10042.3	9475.0	9303.0	9196.3	9118.2	8886.3
50°	9812.0	9884.5	10049.4	10368.0	10872.7	10932.3	10422.0	10228.6	10097.8	9955.6	9614.4
52.5°	9718.1	9847.6	10069.4	10605.4	11337.6	11646.2	11330.5	11161.3	11012.0	10780.2	10274.1
55°	9165.0	9294.5	9748.1	10602.5	11569.4	12146.7	12189.3	12114.0	11946.2	11580.8	10807.3
57.5°	7999.2	8191.1	8909.1	10241.4	11565.1	12577.5	13031.0	13085.0	12897.4	12374.1	11226.7
60°	6384.0	6644.2	7520.0	9440.9	11208.3	12810.7	13768.9	14039.1	13840.1	13156.1	11566.5
62.5°	4454.5	4756.0	5584.9	8186.9	10392.1	12642.9	14307.8	14806.8	14656.2	13855.6	11697.3
65°	2717.1	2813.8	3482.0	6442.2	9004.4	11940.4	14474.1	15222.1	15172.3	14283.6	11504.0
67.5°	1809.9	1891.0	2083.0	4417.6	6989.7	10537.1	14076.0	15149.5	15163.7	14214.0	10795.9
70°	1090.5	1160.2	1285.4	2569.3	4529.9	8340.4	12843.4	14225.4	14307.8	13282.7	9453.7
72.5°	449.3	496.2	610.0	1164.5	2346.0	5293.4	10227.1	12213.5	12405.4	11168.4	7255.6
75°	254.5	278.7	358.3	584.4	1018.0	2466.9	6194.9	8670.3	8953.2	7697.7	4365.0
77.5°	169.2	180.6	231.8	378.2	573.0	841.7	2647.5	4517.2	5057.5	4204.3	1889.6
80°	113.8	123.7	159.3	253.1	372.5	361.1	843.2	1673.5	2058.8	1444.5	460.6
82.5°	76.8	78.2	113.8	166.4	236.1	174.9	248.9	520.4	654.1	418.0	174.9
85°	44.1	42.6	83.8	96.7	105.2	72.5	75.3	156.4	204.7	176.3	99.5
87.5°	5.6	8.5	32.7	25.6	14.2	15.7	15.7	27.1	39.8	42.6	21.3
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°	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9	2466.9
2.5°	2469.7	2468.3	2464.0	2459.8	2449.8	2444.1	2447.0	2444.1	2442.7	2444.1	2449.8
5°	2488.2	2483.9	2472.5	2458.4	2438.5	2414.3	2398.6	2375.8	2354.5	2341.7	2344.6
7.5°	2538.0	2533.7	2518.0	2478.2	2414.3	2313.3	2220.9	2139.9	2078.7	2043.1	2044.6
10°	2617.5	2610.5	2586.3	2498.1	2330.3	2110.0	1926.6	1774.5	1675.0	1628.0	1623.7
12.5°	2711.4	2702.9	2660.2	2479.7	2171.2	1827.1	1574.0	1404.8	1312.3	1271.1	1266.8
15°	2822.3	2811.0	2727.0	2391.5	1939.4	1514.2	1282.5	1155.9	1096.2	1059.2	1060.7
17.5°	2960.2	2940.3	2776.8	2259.3	1687.7	1275.4	1103.3	1008.1	955.5	919.9	917.1
20°	3139.4	3106.7	2816.6	2101.5	1455.9	1124.6	982.5	902.8	863.0	831.8	826.0
22.5°	3389.7	3342.7	2865.0	1930.8	1292.4	1020.9	892.9	834.7	801.9	766.4	760.7
25°	3699.5	3644.1	2924.7	1773.0	1180.1	931.3	827.5	779.2	740.8	699.6	695.3
27.5°	4133.2	4033.7	2995.8	1643.6	1083.4	854.5	767.8	713.7	669.6	635.6	628.4
30°	4616.7	4453.1	3058.3	1565.4	995.3	783.4	689.6	635.6	594.3	570.1	565.9
32.5°	5074.5	4852.7	3099.6	1531.4	915.6	702.3	604.2	546.0	514.7	507.6	511.9
35°	5506.7	5213.9	3095.3	1498.6	844.6	621.4	520.4	460.6	436.5	440.7	440.7
37.5°	6004.3	5599.2	3065.5	1447.4	786.3	547.5	447.9	395.2	373.9	375.4	381.1
40°	6583.1	6044.1	3046.9	1350.7	722.3	479.2	388.2	345.5	329.8	324.2	322.8
42.5°	7200.1	6475.0	3049.8	1241.3	642.7	418.0	347.0	311.4	297.1	292.9	291.5
45°	7820.0	6885.8	3054.1	1127.5	558.7	371.0	317.0	287.2	278.7	273.0	273.0
47.5°	8402.9	7235.7	2974.4	1005.2	476.3	335.6	292.9	273.0	265.9	258.8	258.8
50°	8946.1	7468.9	2782.5	863.0	410.9	307.1	274.4	260.1	253.1	246.0	246.0
52.5°	9368.4	7505.8	2465.4	716.6	365.4	285.8	263.0	250.2	241.7	234.6	233.2
55°	9556.1	7274.0	2014.7	580.2	329.8	267.3	251.6	238.8	228.9	221.8	220.4
57.5°	9507.7	6786.3	1571.1	466.4	295.7	248.9	237.5	228.9	217.5	206.1	204.7
60°	9270.3	6133.7	1184.4	388.2	264.4	228.9	221.8	214.7	199.1	182.0	179.2
62.5°	8859.4	5313.4	844.6	321.3	230.3	206.1	203.4	197.6	174.9	143.6	140.7
65°	8231.0	4316.7	568.8	267.3	197.6	180.6	182.0	172.0	142.2	106.6	103.8
67.5°	7312.5	3156.5	364.0	218.9	164.9	150.7	152.1	146.5	120.8	91.0	86.7
70°	6142.3	2090.1	237.5	166.4	132.2	116.5	125.2	126.6	102.4	73.9	71.1
72.5°	4502.9	1234.1	166.4	123.7	96.7	81.1	102.4	105.2	82.5	55.5	52.6
75°	2566.4	585.8	125.2	89.6	59.8	56.9	79.6	79.6	56.9	37.0	34.1
77.5°	1077.8	244.6	88.1	58.3	34.1	32.7	54.0	49.8	28.4	17.0	17.0
80°	311.4	109.5	46.9	28.4	14.2	12.8	21.3	15.7	7.1	2.9	2.9
82.5°	122.3	48.4	18.4	11.4	5.6	5.6	2.9	0.0	0.0	0.0	0.0
85°	72.5	19.9	8.5	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.4	4.3	2.9	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)