

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: P883087

Luminaire Tested: **NAV-SB3B-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16736 lumens
Efficiency: N/A
Efficacy: 153.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

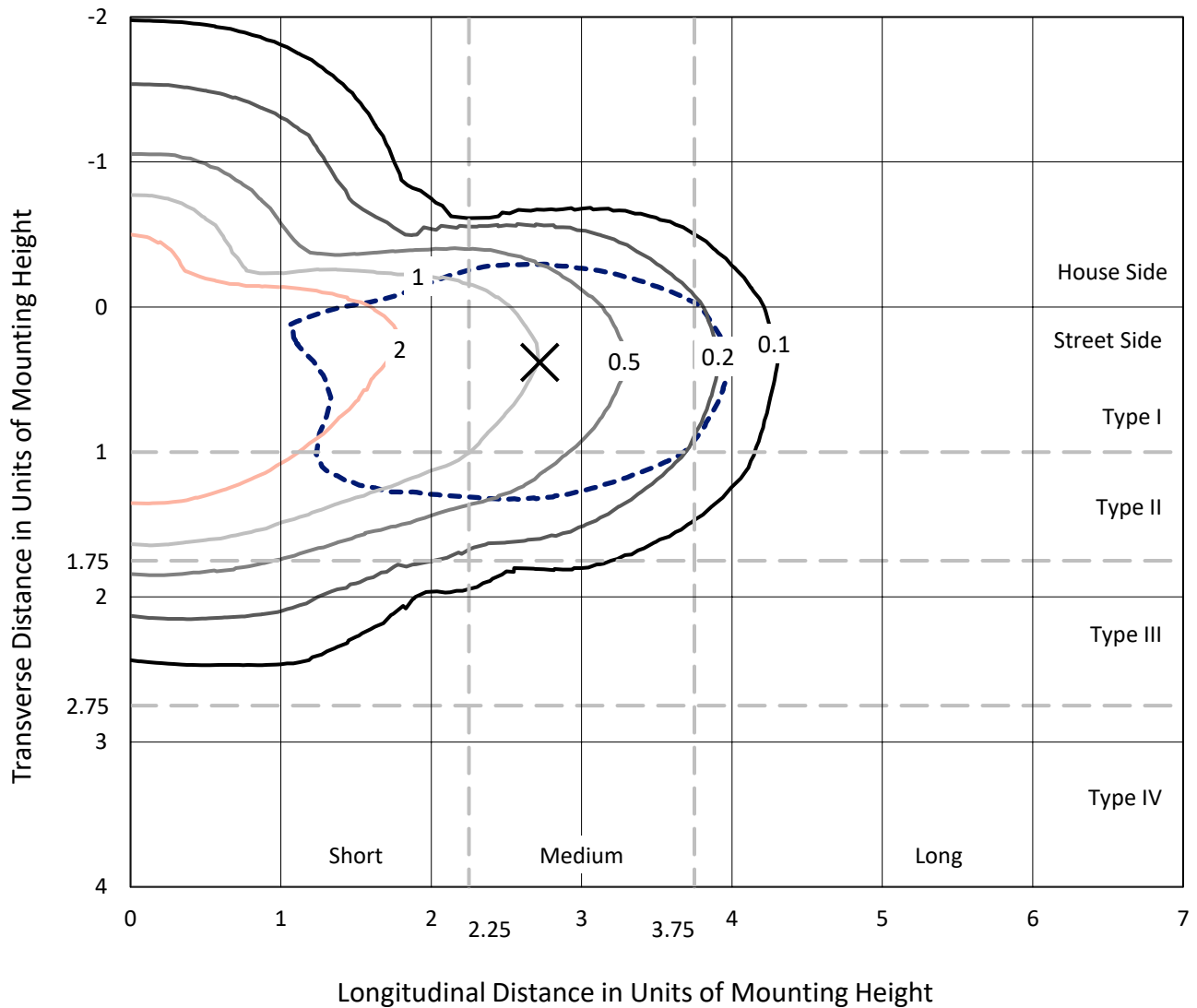
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883087
 CATALOG NUMBER: NAV-SB3B-735-U-T2

Iso-Footcandle Lines of Horizontal Illumination

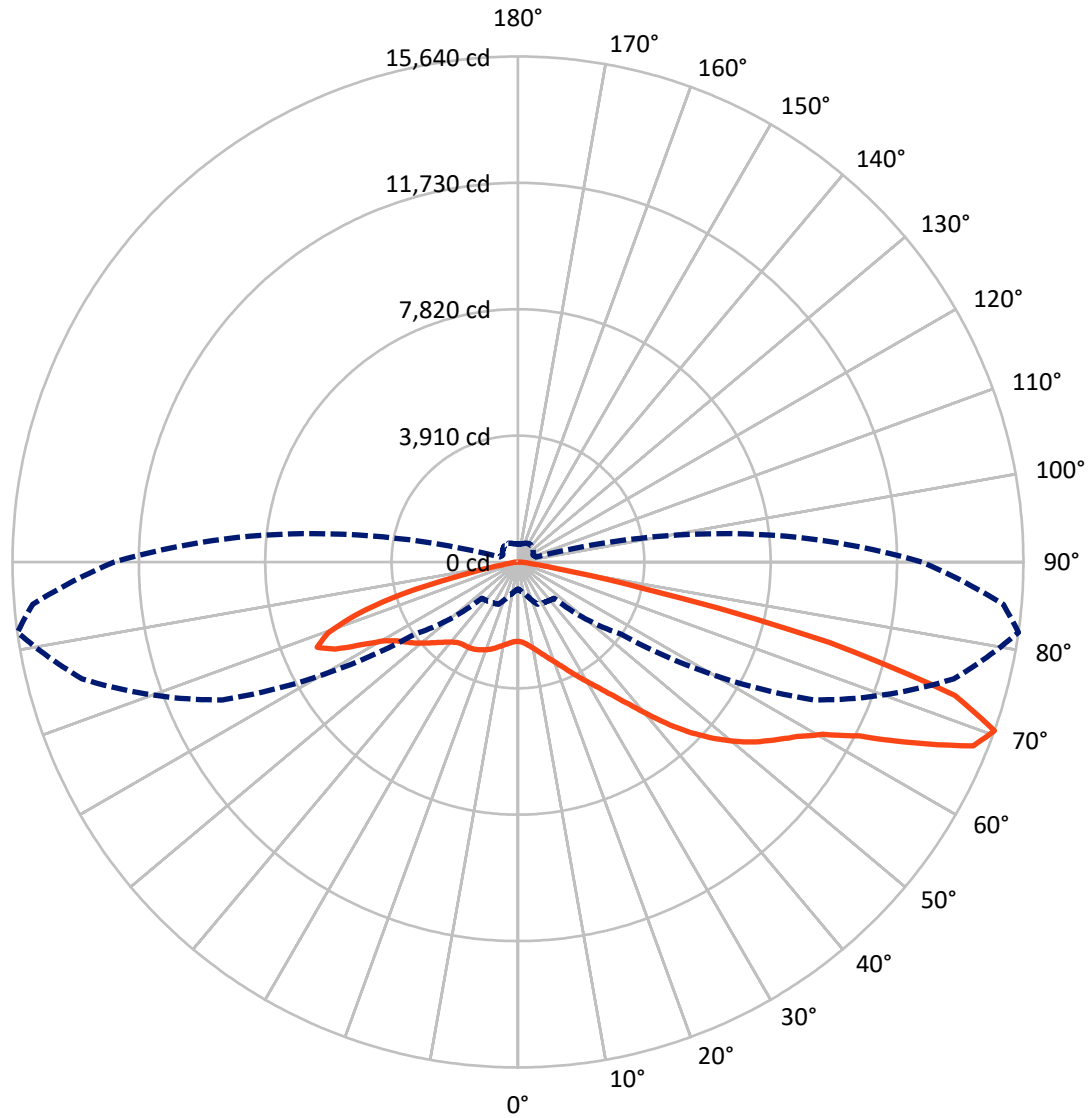
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P883087
CATALOG NUMBER: NAV-SB3B-735-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P883087
 CATALOG NUMBER: NAV-SB3B-735-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4125.8	0.0	4125.8
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	12610.2	0.0	12610.2
	% Fixture	75.3	0.0	75.3
Total	Lumens	16736.0	0.0	16736.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.7	1.4
10°-20°	665.6	4.0
20°-30°	1113.5	6.7
30°-40°	1739.6	10.4
40°-50°	2770.5	16.6
50°-60°	3855.5	23.0
60°-70°	4033.0	24.1
70°-80°	2107.9	12.6
80°-90°	218.9	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°	16736.0	100.0
0°-180°	16736.0	100.0

Coefficient of Utilization



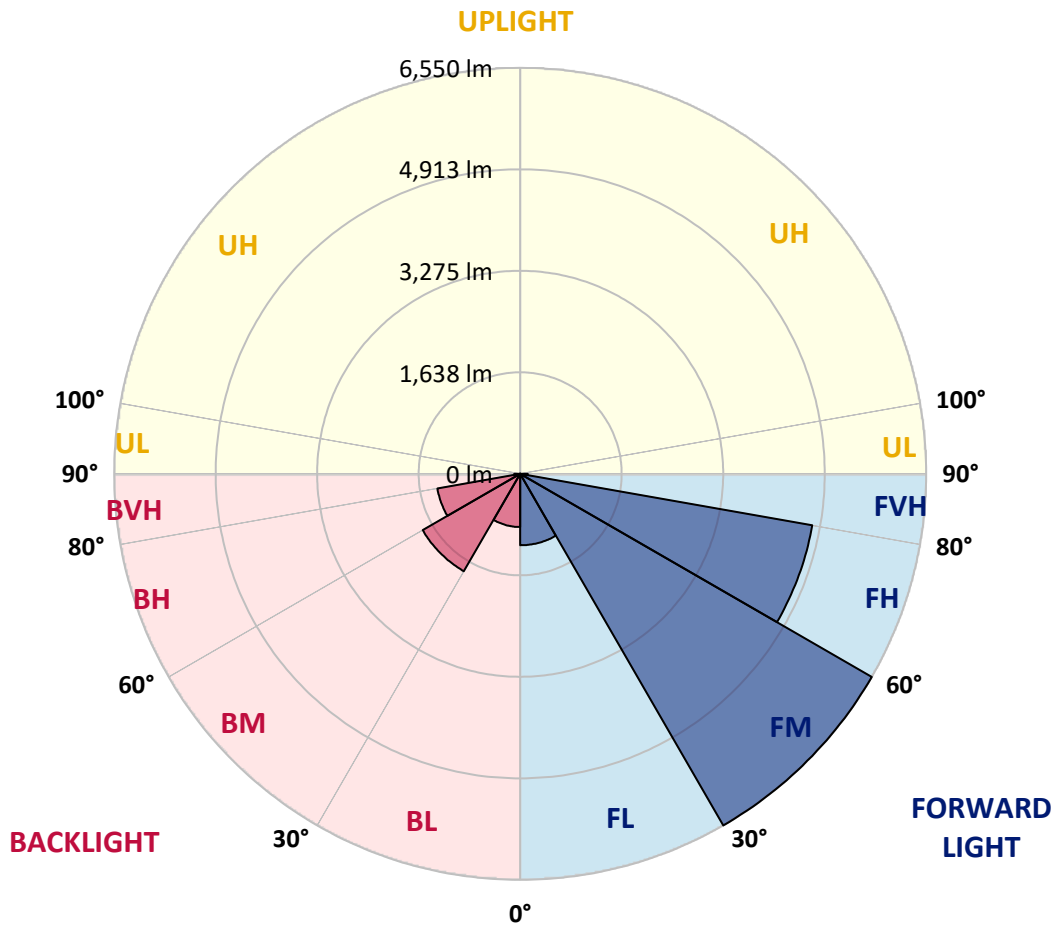
REPORT NUMBER: P883087
 CATALOG NUMBER: NAV-SB3B-735-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1152.5	6.9			
FM (30°-60°)	6550.3	39.1			
FH (60°-80°)	4784.9	28.6			G2/5000
FVH (80°-90°)	122.5	0.7			G2/225
BL (0°-30°)	858.3	5.1	B2/1000		
BM (30°-60°)	1815.2	10.8	B2/2500		
BH (60°-80°)	1356.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	96.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P883087

CATALOG NUMBER: NAV-SB3B-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7
2.5°	2512.3	2526.5	2522.1	2517.6	2517.6	2511.4	2510.5	2501.7	2494.6	2483.0	2480.3
5°	2544.3	2559.4	2557.6	2561.2	2572.7	2575.4	2578.0	2572.7	2558.5	2544.3	2538.1
7.5°	2515.9	2532.7	2538.1	2559.4	2594.9	2626.9	2650.9	2660.6	2647.3	2626.9	2617.1
10°	2420.0	2438.6	2457.3	2507.9	2570.9	2646.4	2710.4	2748.5	2745.9	2726.3	2709.5
12.5°	2225.5	2245.0	2285.0	2383.6	2499.0	2632.2	2751.2	2831.1	2858.7	2844.5	2815.1
15°	2070.1	2086.9	2117.1	2218.4	2368.5	2570.9	2766.3	2921.7	2991.9	2983.9	2948.4
17.5°	2065.6	2072.7	2091.4	2139.3	2254.8	2475.0	2750.3	3010.5	3144.6	3143.7	3099.3
20°	2143.8	2146.4	2157.1	2166.9	2232.6	2402.2	2709.5	3084.2	3316.0	3316.0	3268.1
22.5°	2252.1	2250.3	2261.0	2252.1	2284.1	2396.0	2683.7	3149.1	3506.9	3521.2	3460.8
25°	2414.6	2405.8	2403.1	2382.7	2388.9	2453.7	2712.1	3222.8	3733.4	3762.7	3687.2
27.5°	2631.3	2617.1	2607.3	2560.3	2544.3	2572.7	2799.2	3311.6	3985.6	4036.2	3940.3
30°	2913.7	2888.0	2873.8	2792.1	2734.3	2738.8	2930.6	3429.7	4249.4	4331.1	4209.4
32.5°	3299.1	3259.2	3221.0	3086.9	2981.2	2946.6	3100.2	3593.1	4535.3	4665.9	4509.6
35°	3730.7	3698.8	3657.9	3451.0	3288.5	3208.6	3329.3	3821.3	4870.1	5077.0	4873.7
37.5°	4146.3	4118.8	4138.4	3859.5	3649.9	3533.6	3629.5	4127.7	5283.1	5588.6	5330.1
40°	4576.2	4554.9	4557.5	4291.1	4046.9	3916.3	3993.6	4512.2	5756.4	6196.9	5879.0
42.5°	5043.3	5027.3	4974.0	4737.8	4463.4	4341.7	4412.8	4956.3	6264.4	6889.6	6481.1
45°	5566.4	5556.6	5506.9	5236.0	4921.6	4784.9	4880.8	5446.5	6775.0	7541.4	7085.8
47.5°	6018.4	6026.4	6020.2	5791.9	5466.0	5265.3	5379.9	5958.0	7250.1	8154.2	7665.7
50°	6235.9	6277.7	6339.0	6267.9	6065.4	5861.2	5883.4	6451.7	7703.0	8728.7	8221.6
52.5°	6122.3	6201.3	6368.3	6481.9	6560.1	6517.5	6458.0	6942.0	8129.3	9247.4	8747.4
55°	5698.7	5809.7	6086.8	6361.2	6759.9	7069.8	7148.0	7485.4	8544.9	9703.8	9244.7
57.5°	4927.0	5107.2	5355.9	5910.9	6582.3	7337.1	7952.6	8239.4	8985.4	10191.4	9765.1
60°	3603.7	3845.3	4154.3	4980.2	5960.7	7194.2	8637.3	9397.4	9611.5	10822.8	10442.7
62.5°	2306.3	2455.5	2739.7	3517.6	4644.5	6461.5	8846.8	10845.0	10672.7	11858.3	11458.6
65°	1579.0	1674.9	1935.1	2372.0	3002.5	4809.7	8285.6	11930.2	12358.2	13499.4	13195.7
67.5°	1147.4	1220.2	1442.2	1825.0	1956.4	2846.2	6429.5	11880.5	13996.7	15190.2	14717.8
70°	836.6	888.1	1074.6	1442.2	1505.3	1583.4	3895.0	10099.0	13961.2	15639.6	15073.9
72.5°	619.9	655.4	780.6	1119.0	1218.4	1069.2	1928.0	7339.8	11996.8	14145.9	13692.1
75°	448.5	475.1	567.5	856.1	975.1	814.4	961.8	4289.3	8368.2	9950.7	10030.6
77.5°	342.8	363.2	423.6	627.0	780.6	611.0	596.8	1973.3	3967.8	3987.4	4211.2
80°	275.3	288.6	321.5	441.4	598.6	457.4	389.0	796.6	1253.9	1061.2	1113.6
82.5°	202.5	224.7	271.7	309.9	428.0	315.3	237.1	402.3	476.9	410.3	413.8
85°	115.4	130.5	164.3	222.0	273.5	192.7	135.9	178.5	222.0	182.1	162.5
87.5°	40.9	53.3	57.7	87.0	119.0	79.9	52.4	51.5	72.8	54.2	45.3
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: P883087
 CATALOG NUMBER: NAV-SB3B-735-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7	2453.7
2.5°	2471.5	2467.0	2449.3	2425.3	2400.4	2376.4	2368.5	2351.6	2340.0	2333.8	2340.9
5°	2521.2	2507.0	2465.3	2412.0	2356.0	2295.6	2253.0	2213.9	2185.5	2158.9	2169.5
7.5°	2592.2	2567.4	2495.4	2402.2	2302.7	2202.4	2127.8	2071.0	2032.8	2007.9	2013.2
10°	2674.8	2636.6	2526.5	2387.1	2233.5	2089.6	2001.7	1952.8	1928.9	1915.5	1919.1
12.5°	2769.9	2715.7	2558.5	2352.5	2127.8	1963.5	1903.1	1888.9	1889.8	1890.7	1892.5
15°	2887.1	2811.6	2584.3	2277.0	1990.1	1866.7	1856.0	1879.1	1903.1	1914.7	1913.8
17.5°	3019.4	2912.8	2588.7	2152.7	1855.2	1804.5	1838.3	1888.0	1924.4	1940.4	1944.0
20°	3161.5	3015.8	2556.7	1976.8	1744.1	1753.9	1814.3	1878.2	1918.2	1938.6	1944.0
22.5°	3324.0	3126.0	2480.3	1792.1	1653.6	1698.9	1769.9	1832.1	1873.8	1894.2	1899.6
25°	3509.6	3249.4	2360.5	1636.7	1575.4	1636.7	1707.7	1759.2	1793.0	1811.6	1817.0
27.5°	3715.6	3378.2	2200.6	1513.3	1507.0	1572.8	1631.4	1671.3	1689.1	1703.3	1708.6
30°	3922.6	3495.4	2007.0	1420.0	1447.5	1509.7	1551.4	1569.2	1574.5	1577.2	1583.4
32.5°	4146.3	3596.6	1803.6	1342.7	1390.7	1448.4	1473.3	1481.3	1456.4	1439.5	1444.9
35°	4417.2	3705.0	1604.7	1281.5	1334.8	1384.5	1392.5	1385.4	1356.1	1321.4	1323.2
37.5°	4752.0	3840.0	1445.8	1238.0	1282.4	1315.2	1305.4	1303.7	1306.3	1265.5	1268.1
40°	5162.3	4015.8	1329.4	1204.2	1239.7	1246.8	1219.3	1234.4	1247.7	1185.6	1187.3
42.5°	5617.9	4228.0	1255.7	1181.1	1204.2	1187.3	1144.7	1161.6	1159.8	1078.1	1077.2
45°	6082.3	4458.9	1230.0	1164.2	1171.3	1137.6	1090.5	1095.0	1057.7	984.0	986.6
47.5°	6544.1	4706.7	1245.9	1150.0	1130.5	1092.3	1055.9	1036.4	981.3	926.2	926.2
50°	6997.0	4966.9	1304.6	1121.6	1074.6	1052.3	1025.7	991.1	932.5	885.4	881.8
52.5°	7417.1	5228.9	1370.3	1074.6	1004.4	1017.7	1000.8	960.9	903.2	855.2	856.1
55°	7814.9	5490.9	1396.0	1009.7	938.7	987.5	977.8	904.0	834.8	795.7	792.1
57.5°	8248.3	5806.1	1367.6	927.1	885.4	952.9	915.6	833.9	793.9	764.6	762.0
60°	8848.6	6300.8	1306.3	825.0	834.8	901.4	837.4	803.7	760.2	727.3	725.5
62.5°	9845.9	7223.5	1207.8	723.8	775.3	825.0	800.1	766.4	722.0	690.0	690.0
65°	11320.1	8505.8	1022.2	644.7	708.7	750.4	760.2	726.4	680.3	646.5	648.3
67.5°	12563.4	9310.4	773.5	579.0	640.3	690.0	717.6	684.7	635.9	603.0	603.9
70°	12495.0	8726.1	590.6	514.2	579.9	630.5	666.0	640.3	587.9	556.8	559.5
72.5°	11098.1	7299.8	477.8	448.5	518.6	568.4	611.0	591.4	538.2	508.0	508.0
75°	8153.3	5181.8	381.9	381.9	442.3	503.5	550.6	538.2	489.3	468.0	461.8
77.5°	3436.8	2174.0	299.3	317.0	367.7	432.5	491.1	495.5	452.9	479.6	435.1
80°	913.8	599.4	228.2	249.5	288.6	357.0	427.2	425.4	379.2	354.3	329.5
82.5°	348.1	236.2	162.5	175.8	208.7	273.5	338.4	349.0	302.8	262.0	262.0
85°	134.1	101.2	100.4	105.7	121.7	181.2	255.8	264.6	228.2	193.6	199.8
87.5°	34.6	30.2	37.3	35.5	55.9	96.8	146.5	151.9	139.4	80.8	115.4
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)