

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: P882967

Luminaire Tested: **NAV-SB3A-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882967  
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-SB3A-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

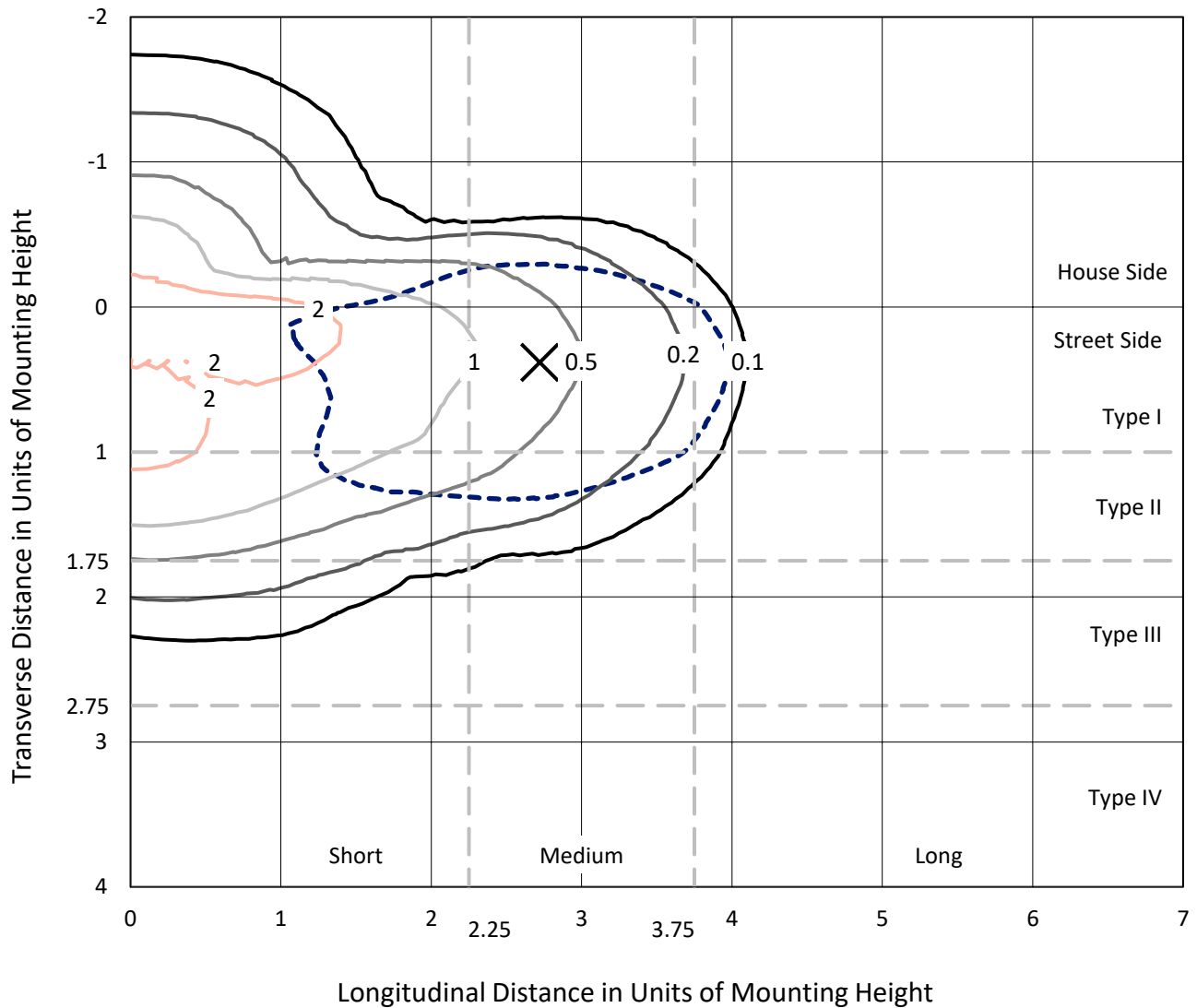
Lumens per Lamp: N/A  
Luminaire Lumens: 11665 lumens  
Efficiency: N/A  
Efficacy: 137.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 0.717  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

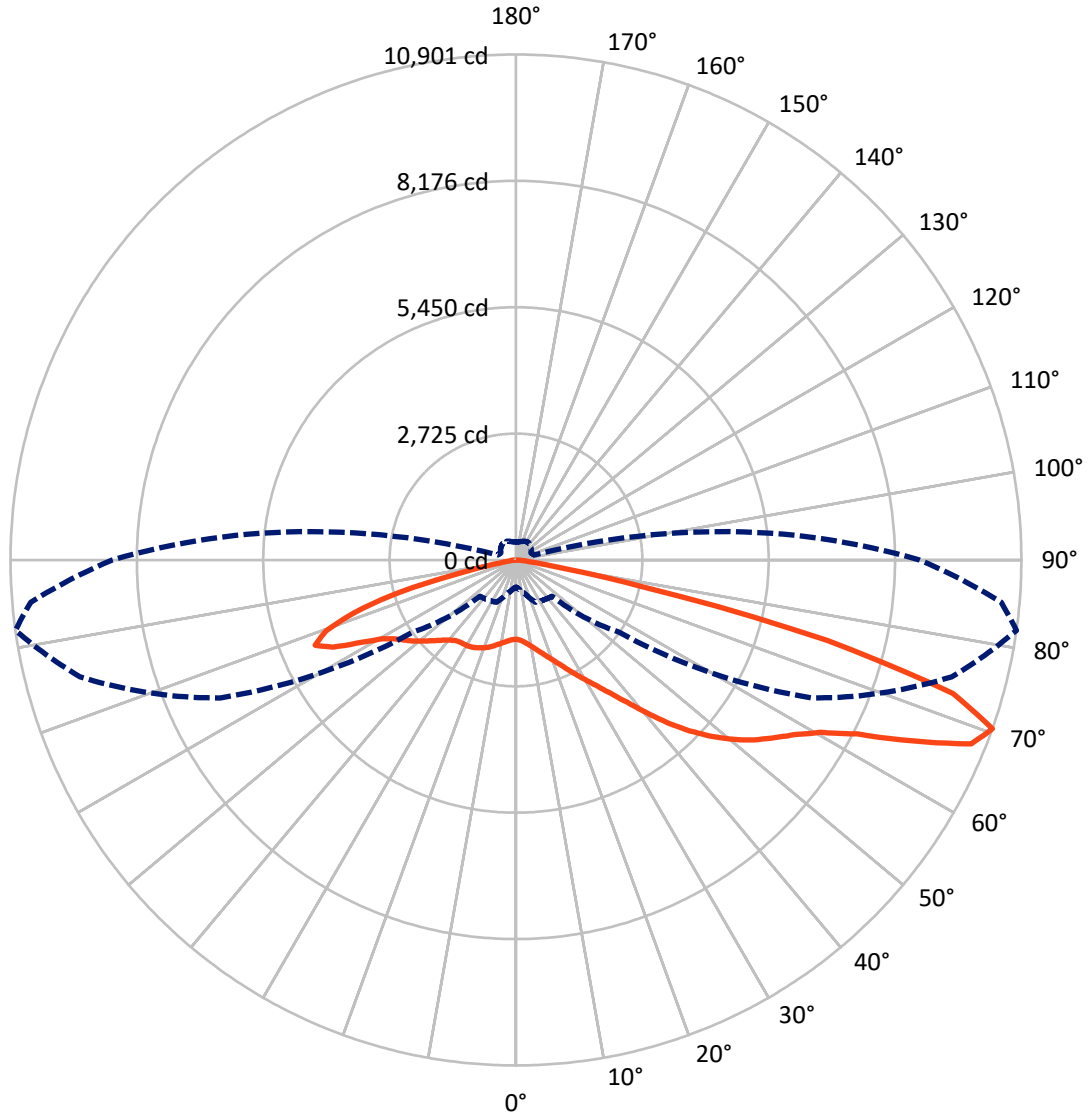
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2875.7	0.0	2875.7
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	8789.3	0.0	8789.3
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	11665.0	0.0	11665.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.5	1.4
10°-20°	463.9	4.0
20°-30°	776.1	6.7
30°-40°	1212.5	10.4
40°-50°	1931.0	16.6
50°-60°	2687.3	23.0
60°-70°	2811.0	24.1
70°-80°	1469.2	12.6
80°-90°	152.6	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°	11665.0	100.0
0°-180°	11665.0	100.0

**Coefficient of Utilization**

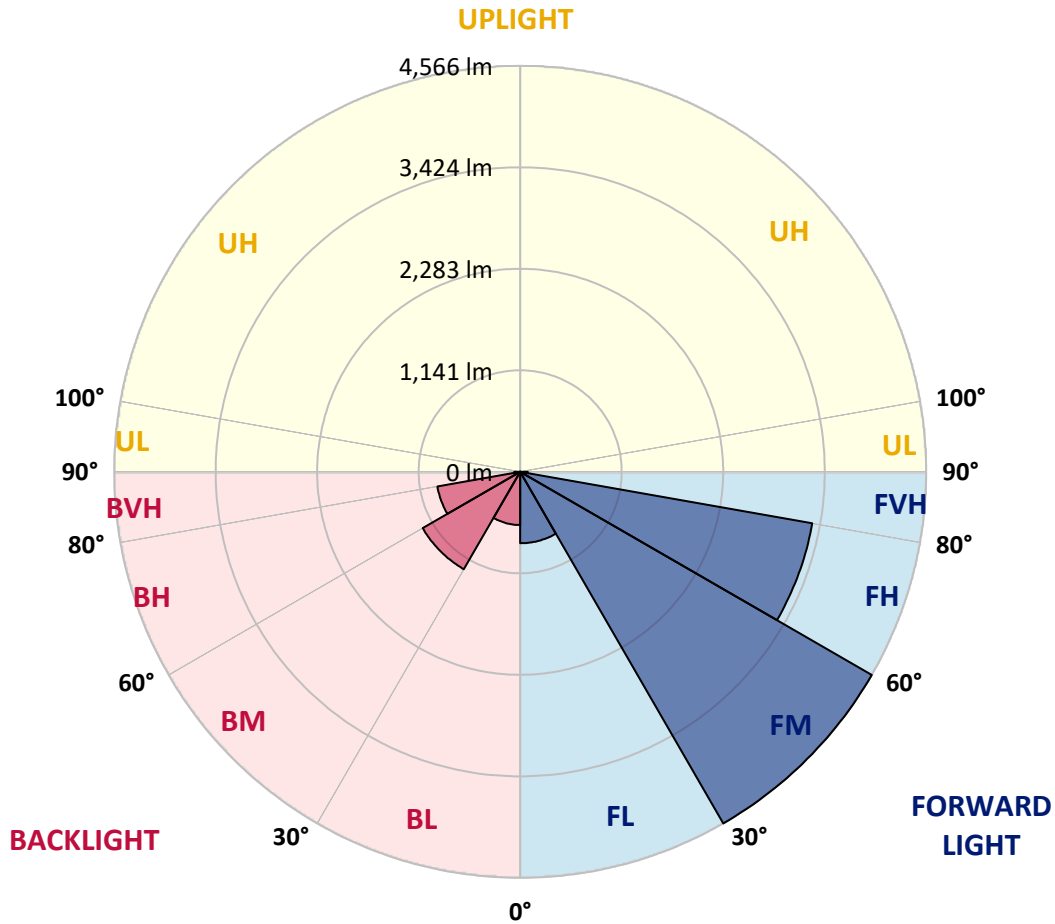


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	803.3	6.9			
FM (30°-60°)	4565.6	39.1			
FH (60°-80°)	3335.1	28.6			G2/5000
FVH (80°-90°)	85.4	0.7			G1/100
BL (0°-30°)	598.3	5.1	B2/1000		
BM (30°-60°)	1265.2	10.8	B2/2500		
BH (60°-80°)	945.1	8.1	B2/1000		G2/1000
BVH (80°-90°)	67.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2
2.5°	1751.1	1761.0	1757.9	1754.8	1754.8	1750.5	1749.8	1743.7	1738.7	1730.7	1728.8
5°	1773.4	1783.9	1782.7	1785.1	1793.2	1795.0	1796.9	1793.2	1783.3	1773.4	1769.0
7.5°	1753.6	1765.3	1769.0	1783.9	1808.7	1830.9	1847.6	1854.5	1845.2	1830.9	1824.1
10°	1686.7	1699.7	1712.7	1748.0	1791.9	1844.6	1889.1	1915.7	1913.9	1900.3	1888.5
12.5°	1551.2	1564.8	1592.6	1661.3	1741.8	1834.6	1917.6	1973.3	1992.5	1982.6	1962.2
15°	1442.8	1454.6	1475.6	1546.2	1650.8	1791.9	1928.1	2036.4	2085.3	2079.8	2055.0
17.5°	1439.7	1444.7	1457.7	1491.1	1571.6	1725.1	1917.0	2098.3	2191.8	2191.2	2160.2
20°	1494.2	1496.1	1503.5	1510.3	1556.1	1674.3	1888.5	2149.7	2311.3	2311.3	2277.8
22.5°	1569.7	1568.5	1575.9	1569.7	1592.0	1670.0	1870.6	2194.9	2444.3	2454.2	2412.2
25°	1683.0	1676.8	1675.0	1660.7	1665.0	1710.2	1890.4	2246.3	2602.2	2622.6	2570.0
27.5°	1834.0	1824.1	1817.3	1784.5	1773.4	1793.2	1951.0	2308.2	2778.0	2813.3	2746.4
30°	2030.9	2012.9	2003.0	1946.1	1905.8	1908.9	2042.6	2390.5	2961.8	3018.8	2934.0
32.5°	2299.5	2271.6	2245.0	2151.6	2077.9	2053.8	2160.9	2504.4	3161.1	3252.1	3143.2
35°	2600.3	2578.0	2549.6	2405.3	2292.1	2236.4	2320.5	2663.5	3394.5	3538.7	3396.9
37.5°	2890.0	2870.8	2884.4	2690.1	2544.0	2462.9	2529.8	2877.0	3682.3	3895.2	3715.1
40°	3189.6	3174.7	3176.6	2990.9	2820.7	2729.7	2783.5	3145.0	4012.2	4319.2	4097.6
42.5°	3515.2	3504.0	3466.9	3302.2	3111.0	3026.2	3075.7	3454.5	4366.3	4802.0	4517.3
45°	3879.8	3872.9	3838.3	3649.5	3430.4	3335.1	3401.9	3796.2	4722.2	5256.4	4938.8
47.5°	4194.8	4200.4	4196.0	4037.0	3809.8	3669.9	3749.8	4152.7	5053.3	5683.5	5343.0
50°	4346.5	4375.6	4418.3	4368.7	4227.6	4085.3	4100.7	4496.9	5369.0	6083.9	5730.5
52.5°	4267.2	4322.3	4438.7	4517.9	4572.4	4542.7	4501.2	4838.5	5666.1	6445.4	6096.9
55°	3972.0	4049.4	4242.5	4433.7	4711.7	4927.7	4982.1	5217.4	5955.8	6763.6	6443.6
57.5°	3434.1	3559.7	3733.1	4119.9	4587.9	5114.0	5542.9	5742.9	6262.8	7103.4	6806.3
60°	2511.8	2680.2	2895.6	3471.2	4154.6	5014.3	6020.2	6550.0	6699.2	7543.5	7278.6
62.5°	1607.5	1711.5	1909.5	2451.8	3237.3	4503.7	6166.3	7559.0	7438.9	8265.2	7986.7
65°	1100.5	1167.4	1348.8	1653.3	2092.8	3352.4	5775.1	8315.3	8613.7	9409.1	9197.4
67.5°	799.7	850.5	1005.2	1272.0	1363.6	1983.8	4481.4	8280.7	9755.7	10587.6	10258.3
70°	583.1	619.0	749.0	1005.2	1049.2	1103.6	2714.8	7039.0	9730.9	10900.8	10506.5
72.5°	432.0	456.8	544.1	779.9	849.2	745.2	1343.8	5115.8	8361.8	9859.7	9543.4
75°	312.6	331.2	395.5	596.7	679.6	567.6	670.4	2989.7	5832.6	6935.6	6991.4
77.5°	238.9	253.2	295.3	437.0	544.1	425.9	416.0	1375.4	2765.6	2779.2	2935.2
80°	191.9	201.2	224.1	307.6	417.2	318.8	271.1	555.2	874.0	739.7	776.2
82.5°	141.1	156.6	189.4	216.0	298.3	219.7	165.3	280.4	332.4	286.0	288.4
85°	80.5	91.0	114.5	154.7	190.6	134.3	94.7	124.4	154.7	126.9	113.3
87.5°	28.5	37.1	40.2	60.7	82.9	55.7	36.5	35.9	50.8	37.8	31.6
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°	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2	1710.2
2.5°	1722.6	1719.5	1707.1	1690.4	1673.1	1656.4	1650.8	1639.1	1631.0	1626.7	1631.6
5°	1757.3	1747.4	1718.3	1681.1	1642.1	1600.1	1570.3	1543.1	1523.3	1504.7	1512.2
7.5°	1806.8	1789.5	1739.3	1674.3	1605.0	1535.1	1483.1	1443.5	1416.8	1399.5	1403.2
10°	1864.4	1837.7	1761.0	1663.8	1556.7	1456.5	1395.2	1361.1	1344.4	1335.1	1337.6
12.5°	1930.6	1892.8	1783.3	1639.7	1483.1	1368.6	1326.5	1316.6	1317.2	1317.8	1319.0
15°	2012.3	1959.7	1801.2	1587.1	1387.1	1301.1	1293.7	1309.8	1326.5	1334.5	1333.9
17.5°	2104.5	2030.2	1804.3	1500.4	1293.0	1257.8	1281.3	1315.9	1341.3	1352.5	1354.9
20°	2203.6	2102.0	1782.0	1377.8	1215.7	1222.5	1264.6	1309.1	1337.0	1351.2	1354.9
22.5°	2316.8	2178.8	1728.8	1249.1	1152.5	1184.1	1233.6	1277.0	1306.0	1320.3	1324.0
25°	2446.2	2264.8	1645.2	1140.8	1098.1	1140.8	1190.3	1226.2	1249.7	1262.7	1266.4
27.5°	2589.8	2354.6	1533.8	1054.7	1050.4	1096.2	1137.1	1164.9	1177.3	1187.2	1190.9
30°	2734.0	2436.3	1398.9	989.7	1008.9	1052.3	1081.4	1093.7	1097.4	1099.3	1103.6
32.5°	2890.0	2506.9	1257.1	935.9	969.3	1009.6	1026.9	1032.5	1015.1	1003.4	1007.1
35°	3078.8	2582.4	1118.5	893.2	930.3	965.0	970.6	965.6	945.2	921.0	922.3
37.5°	3312.1	2676.5	1007.7	862.9	893.8	916.7	909.9	908.7	910.5	882.0	883.9
40°	3598.1	2799.0	926.6	839.3	864.1	869.0	849.9	860.4	869.7	826.3	827.6
42.5°	3915.7	2947.0	875.2	823.2	839.3	827.6	797.9	809.6	808.4	751.4	750.8
45°	4239.4	3107.9	857.3	811.5	816.4	792.9	760.1	763.2	737.2	685.8	687.7
47.5°	4561.2	3280.6	868.4	801.6	788.0	761.3	736.0	722.3	684.0	645.6	645.6
50°	4876.9	3461.9	909.3	781.8	749.0	733.5	714.9	690.8	649.9	617.1	614.6
52.5°	5169.7	3644.5	955.1	749.0	700.1	709.3	697.6	669.7	629.5	596.1	596.7
55°	5447.0	3827.1	973.0	703.8	654.3	688.3	681.5	630.1	581.8	554.6	552.1
57.5°	5749.1	4046.9	953.2	646.2	617.1	664.2	638.2	581.2	553.4	532.9	531.1
60°	6167.5	4391.6	910.5	575.0	581.8	628.3	583.7	560.2	529.8	506.9	505.7
62.5°	6862.6	5034.8	841.8	504.5	540.4	575.0	557.7	534.2	503.2	480.9	480.9
65°	7890.1	5928.6	712.4	449.4	493.9	523.0	529.8	506.3	474.1	450.6	451.9
67.5°	8756.7	6489.4	539.1	403.6	446.3	480.9	500.1	477.2	443.2	420.3	420.9
70°	8709.0	6082.1	411.6	358.4	404.2	439.5	464.2	446.3	409.8	388.1	390.0
72.5°	7735.4	5088.0	333.0	312.6	361.5	396.1	425.9	412.2	375.1	354.1	354.1
75°	5682.8	3611.7	266.2	266.2	308.3	351.0	383.8	375.1	341.1	326.2	321.9
77.5°	2395.4	1515.3	208.6	221.0	256.3	301.4	342.3	345.4	315.7	334.2	303.3
80°	636.9	417.8	159.1	173.9	201.2	248.8	297.7	296.5	264.3	247.0	229.6
82.5°	242.6	164.6	113.3	122.6	145.5	190.6	235.8	243.3	211.1	182.6	182.6
85°	93.5	70.6	69.9	73.7	84.8	126.3	178.3	184.5	159.1	134.9	139.3
87.5°	24.1	21.0	26.0	24.8	39.0	67.5	102.1	105.8	97.2	56.3	80.5
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)