

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: P882407

Luminaire Tested: **NAV-SB2B-735-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882407  
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-SB2B-735-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 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: 11371 lumens  
Efficiency: N/A  
Efficacy: 153.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

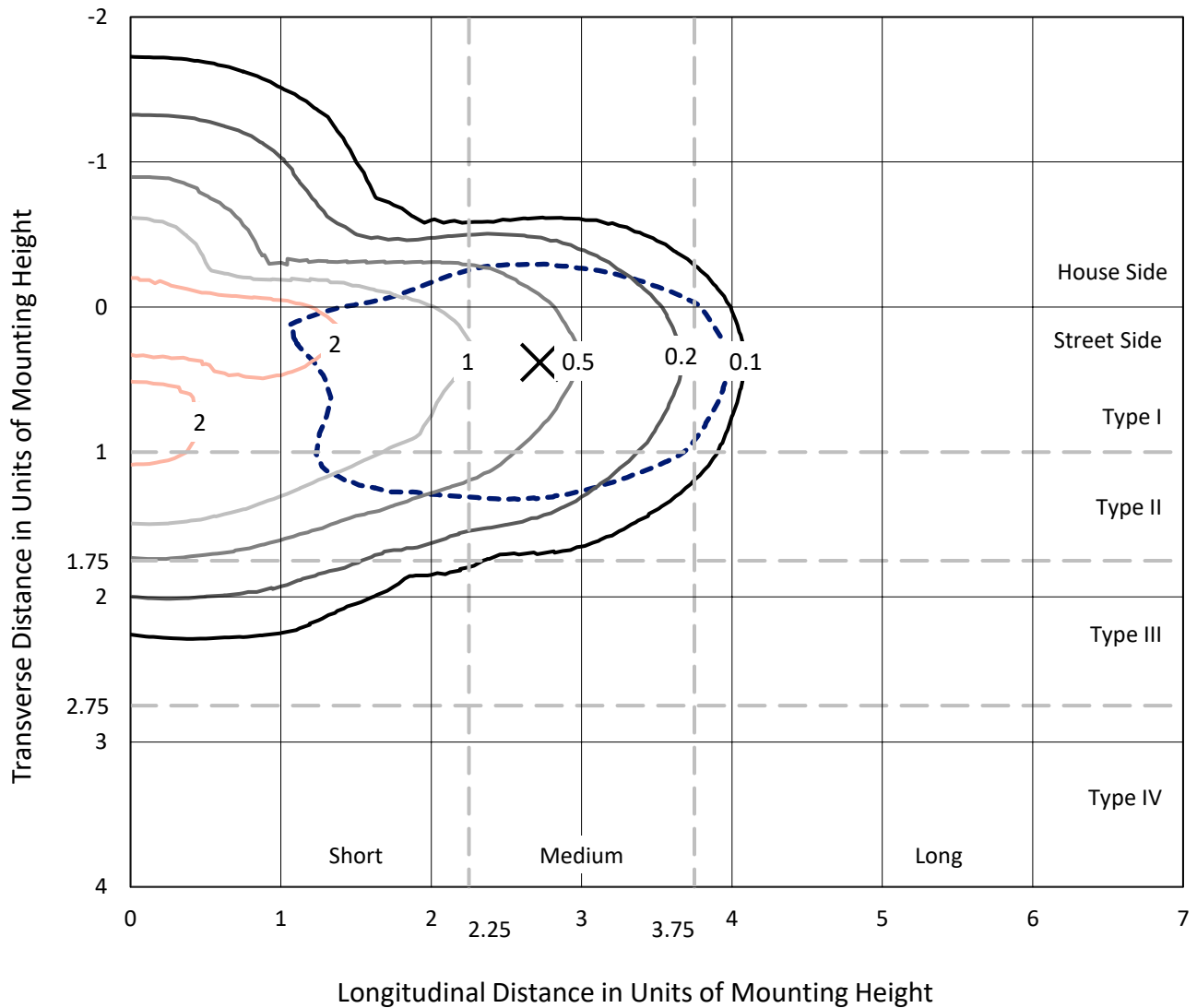
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.627  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

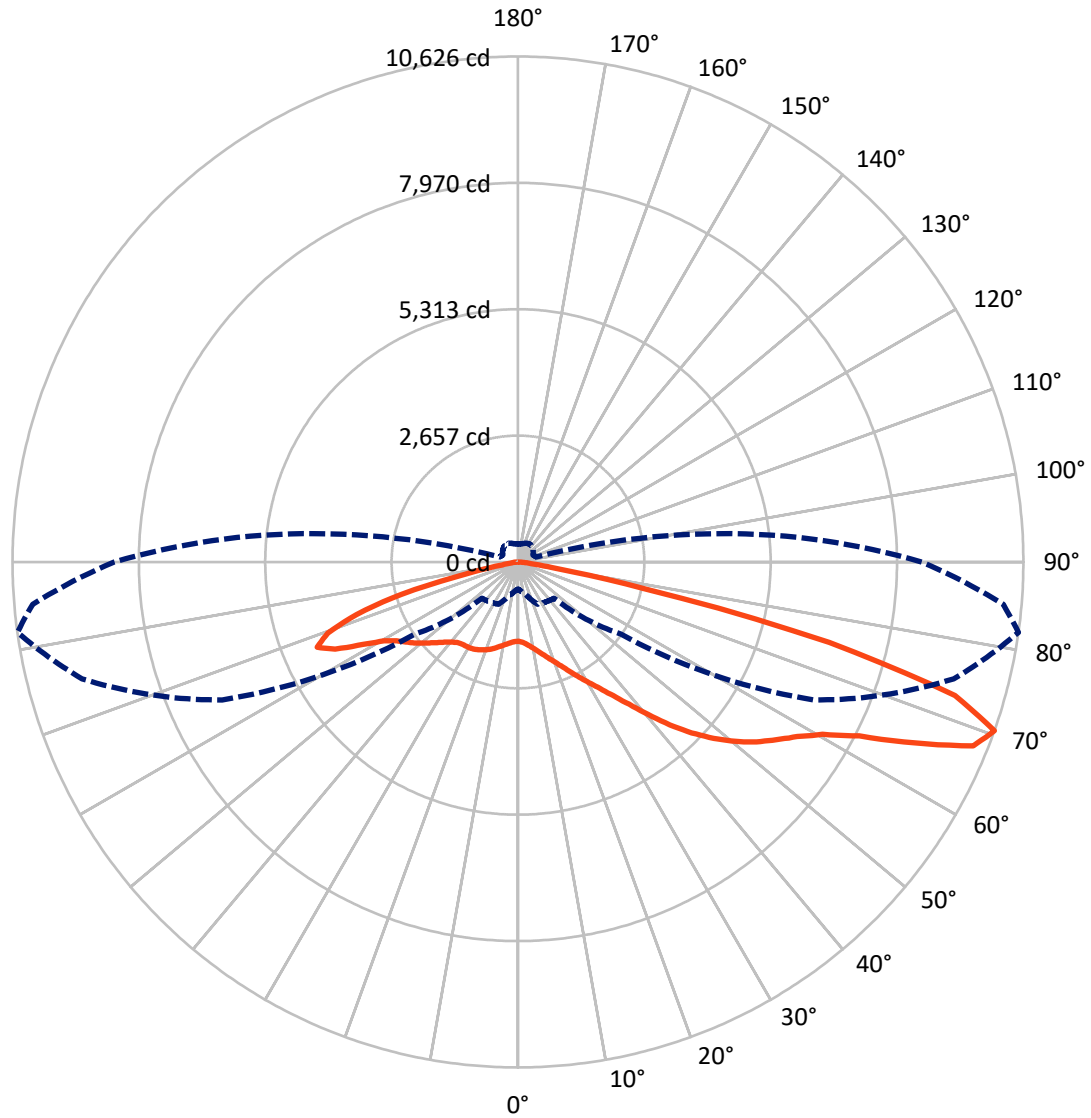
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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	2803.2	0.0	2803.2
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	8567.8	0.0	8567.8
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	11371.0	0.0	11371.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.4	1.4
10°-20°	452.2	4.0
20°-30°	756.5	6.7
30°-40°	1181.9	10.4
40°-50°	1882.4	16.6
50°-60°	2619.5	23.0
60°-70°	2740.1	24.1
70°-80°	1432.1	12.6
80°-90°	148.7	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°	11371.0	100.0
0°-180°	11371.0	100.0

**Coefficient of Utilization**

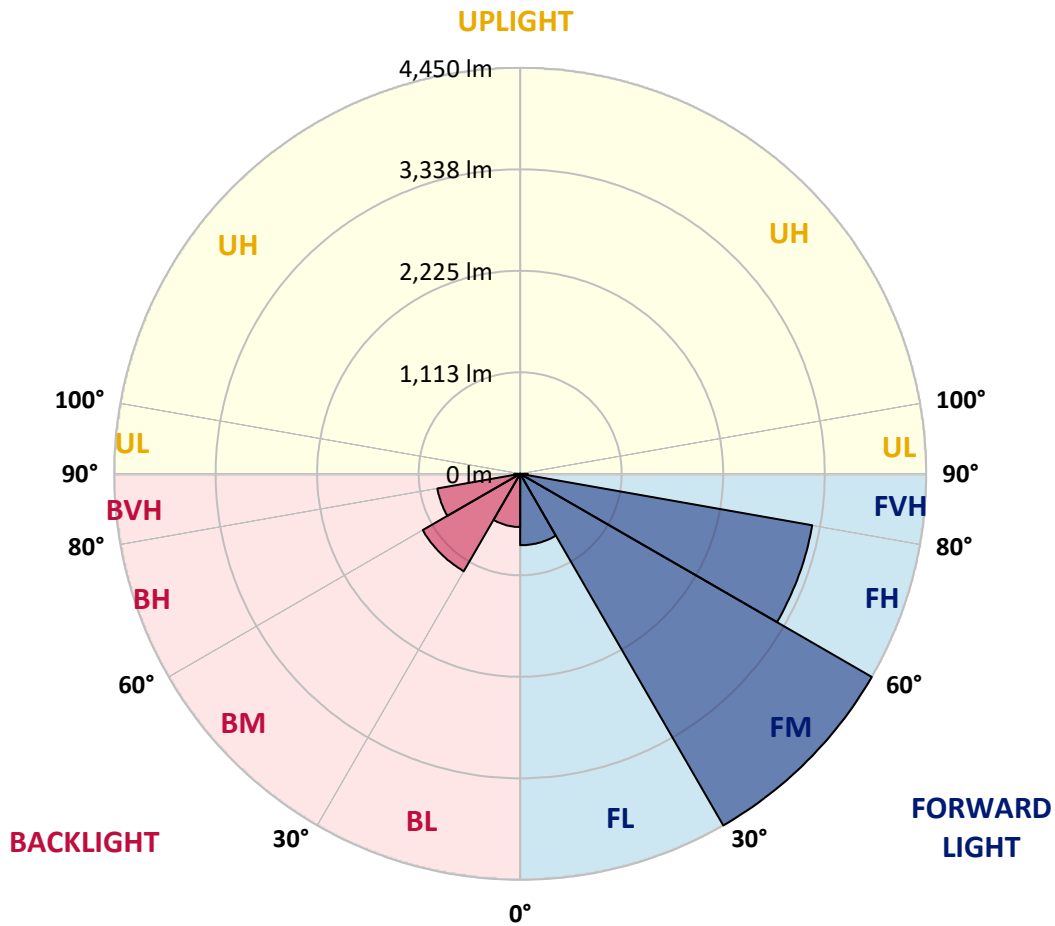


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	783.0	6.9			
FM (30°-60°)	4450.5	39.1			
FH (60°-80°)	3251.0	28.6			G2/5000
FVH (80°-90°)	83.2	0.7			G1/100
BL (0°-30°)	583.2	5.1	B2/1000		
BM (30°-60°)	1233.3	10.8	B2/2500		
BH (60°-80°)	921.3	8.1	B2/1000		G2/1000
BVH (80°-90°)	65.5	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°	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1
2.5°	1707.0	1716.6	1713.6	1710.6	1710.6	1706.4	1705.7	1699.7	1694.9	1687.0	1685.2
5°	1728.7	1738.9	1737.7	1740.1	1748.0	1749.8	1751.6	1748.0	1738.3	1728.7	1724.5
7.5°	1709.4	1720.8	1724.5	1738.9	1763.1	1784.8	1801.1	1807.7	1798.7	1784.8	1778.2
10°	1644.2	1656.9	1669.5	1703.9	1746.8	1798.1	1841.5	1867.5	1865.6	1852.4	1840.9
12.5°	1512.1	1525.3	1552.5	1619.5	1697.9	1788.4	1869.3	1923.6	1942.3	1932.6	1912.7
15°	1406.5	1417.9	1438.5	1507.2	1609.2	1746.8	1879.5	1985.1	2032.8	2027.3	2003.2
17.5°	1403.5	1408.3	1421.0	1453.5	1532.0	1681.6	1868.7	2045.4	2136.6	2136.0	2105.8
20°	1456.6	1458.4	1465.6	1472.2	1516.9	1632.1	1840.9	2095.5	2253.0	2253.0	2220.4
22.5°	1530.2	1529.0	1536.2	1530.2	1551.9	1627.9	1823.4	2139.6	2382.7	2392.4	2351.4
25°	1640.6	1634.5	1632.7	1618.9	1623.1	1667.1	1842.7	2189.7	2536.6	2556.5	2505.2
27.5°	1787.8	1778.2	1771.5	1739.5	1728.7	1748.0	1901.8	2250.0	2708.0	2742.3	2677.2
30°	1979.7	1962.2	1952.5	1897.0	1857.8	1860.8	1991.1	2330.2	2887.2	2942.7	2860.0
32.5°	2241.5	2214.4	2188.4	2097.3	2025.5	2002.0	2106.4	2441.3	3081.4	3170.1	3063.9
35°	2534.8	2513.1	2485.3	2344.7	2234.3	2180.0	2262.1	2596.3	3308.9	3449.5	3311.3
37.5°	2817.2	2798.5	2811.7	2622.3	2479.9	2400.8	2466.0	2804.5	3589.5	3797.1	3621.5
40°	3109.2	3094.7	3096.5	2915.5	2749.6	2660.9	2713.4	3065.8	3911.1	4210.4	3994.4
42.5°	3426.6	3415.7	3379.5	3219.0	3032.6	2949.9	2998.2	3367.4	4256.2	4681.0	4403.4
45°	3782.0	3775.3	3741.5	3557.5	3343.9	3251.0	3316.2	3700.5	4603.2	5123.9	4814.3
47.5°	4089.1	4094.5	4090.3	3935.2	3713.8	3577.4	3655.3	4048.1	4926.0	5540.2	5208.4
50°	4236.9	4265.3	4306.9	4258.6	4121.1	3982.3	3997.4	4383.5	5233.7	5930.6	5586.1
52.5°	4159.7	4213.4	4326.8	4404.0	4457.1	4428.2	4387.8	4716.6	5523.3	6283.0	5943.3
55°	3871.9	3947.3	4135.5	4322.0	4592.9	4803.5	4856.6	5085.9	5805.7	6593.1	6281.2
57.5°	3347.5	3470.0	3639.0	4016.1	4472.2	4985.1	5403.2	5598.1	6105.0	6924.4	6634.7
60°	2448.5	2612.6	2822.6	3383.7	4049.9	4888.0	5868.4	6384.9	6530.3	7353.4	7095.1
62.5°	1567.0	1668.3	1861.4	2390.0	3155.7	4390.2	6010.8	7368.4	7251.4	8056.9	7785.4
65°	1072.8	1138.0	1314.8	1611.6	2040.0	3267.9	5629.5	8105.8	8396.6	9171.9	8965.6
67.5°	779.6	829.0	979.9	1239.9	1329.2	1933.8	4368.4	8072.0	9509.8	10320.8	9999.8
70°	568.4	603.4	730.1	979.9	1022.7	1075.8	2646.4	6861.6	9485.7	10626.1	10241.7
72.5°	421.2	445.3	530.4	760.3	827.8	726.5	1309.9	4986.9	8151.0	9611.2	9302.9
75°	304.7	322.8	385.6	581.7	662.5	553.3	653.5	2914.3	5685.6	6760.8	6815.1
77.5°	232.9	246.8	287.8	426.0	530.4	415.1	405.5	1340.7	2695.9	2709.2	2861.2
80°	187.0	196.1	218.4	299.9	406.7	310.7	264.3	541.2	852.0	721.0	756.6
82.5°	137.6	152.7	184.6	210.6	290.8	214.2	161.1	273.3	324.0	278.8	281.2
85°	78.4	88.7	111.6	150.8	185.8	130.9	92.3	121.3	150.8	123.7	110.4
87.5°	27.8	36.2	39.2	59.1	80.9	54.3	35.6	35.0	49.5	36.8	30.8
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°	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1	1667.1
2.5°	1679.2	1676.2	1664.1	1647.8	1630.9	1614.6	1609.2	1597.7	1589.9	1585.7	1590.5
5°	1713.0	1703.3	1675.0	1638.8	1600.8	1559.7	1530.8	1504.2	1484.9	1466.8	1474.1
7.5°	1761.3	1744.4	1695.5	1632.1	1564.6	1496.4	1445.7	1407.1	1381.1	1364.2	1367.9
10°	1817.4	1791.4	1716.6	1621.9	1517.5	1419.7	1360.0	1326.8	1310.5	1301.5	1303.9
12.5°	1881.9	1845.1	1738.3	1598.3	1445.7	1334.1	1293.0	1283.4	1284.0	1284.6	1285.8
15°	1961.6	1910.3	1755.8	1547.1	1352.2	1268.3	1261.1	1276.7	1293.0	1300.9	1300.3
17.5°	2051.5	1979.1	1758.8	1462.6	1260.5	1226.1	1249.0	1282.8	1307.5	1318.4	1320.8
20°	2148.0	2049.1	1737.1	1343.1	1185.0	1191.7	1232.7	1276.1	1303.3	1317.2	1320.8
22.5°	2258.4	2123.9	1685.2	1217.6	1123.5	1154.3	1202.5	1244.8	1273.1	1287.0	1290.6
25°	2384.5	2207.8	1603.8	1112.0	1070.4	1112.0	1160.3	1195.3	1218.2	1230.9	1234.5
27.5°	2524.5	2295.2	1495.2	1028.2	1023.9	1068.6	1108.4	1135.6	1147.6	1157.3	1160.9
30°	2665.1	2374.9	1363.6	964.8	983.5	1025.7	1054.1	1066.2	1069.8	1071.6	1075.8
32.5°	2817.2	2443.7	1225.5	912.3	944.9	984.1	1001.0	1006.4	989.5	978.1	981.7
35°	3001.2	2517.3	1090.3	870.7	906.9	940.7	946.1	941.3	921.4	897.8	899.0
37.5°	3228.7	2609.0	982.3	841.1	871.3	893.6	887.0	885.8	887.6	859.8	861.6
40°	3507.4	2728.5	903.3	818.2	842.3	847.1	828.4	838.7	847.7	805.5	806.7
42.5°	3817.0	2872.7	853.2	802.5	818.2	806.7	777.8	789.2	788.0	732.5	731.9
45°	4132.5	3029.6	835.7	791.0	795.9	772.9	740.9	744.0	718.6	668.5	670.4
47.5°	4446.3	3197.9	846.5	781.4	768.1	742.2	717.4	704.1	666.7	629.3	629.3
50°	4754.0	3374.7	886.4	762.1	730.1	715.0	696.9	673.4	633.5	601.6	599.2
52.5°	5039.4	3552.7	931.0	730.1	682.4	691.5	680.0	652.9	613.6	581.1	581.7
55°	5309.7	3730.7	948.5	686.0	637.8	671.0	664.3	614.2	567.2	540.6	538.2
57.5°	5604.2	3944.9	929.2	629.9	601.6	647.4	622.1	566.6	539.4	519.5	517.7
60°	6012.0	4281.0	887.6	560.5	567.2	612.4	569.0	546.1	516.5	494.2	493.0
62.5°	6689.6	4907.9	820.6	491.8	526.7	560.5	543.6	520.7	490.5	468.8	468.8
65°	7691.2	5779.1	694.5	438.1	481.5	509.9	516.5	493.6	462.2	439.3	440.5
67.5°	8536.0	6325.8	525.5	393.4	435.0	468.8	487.5	465.2	432.0	409.7	410.3
70°	8489.5	5928.8	401.2	349.4	394.0	428.4	452.5	435.0	399.4	378.3	380.1
72.5°	7540.4	4959.8	324.6	304.7	352.4	386.2	415.1	401.8	365.6	345.1	345.1
75°	5539.6	3520.7	259.5	259.5	300.5	342.1	374.1	365.6	332.5	318.0	313.8
77.5°	2335.1	1477.1	203.3	215.4	249.8	293.8	333.7	336.7	307.7	325.8	295.7
80°	620.9	407.3	155.1	169.5	196.1	242.6	290.2	289.0	257.6	240.7	223.9
82.5°	236.5	160.5	110.4	119.5	141.8	185.8	229.9	237.1	205.8	178.0	178.0
85°	91.1	68.8	68.2	71.8	82.7	123.1	173.8	179.8	155.1	131.5	135.8
87.5°	23.5	20.5	25.3	24.1	38.0	65.8	99.6	103.2	94.7	54.9	78.4
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)