

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: P882067

Luminaire Tested: **NAV-SB1D-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882067
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-SB1D-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10091 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

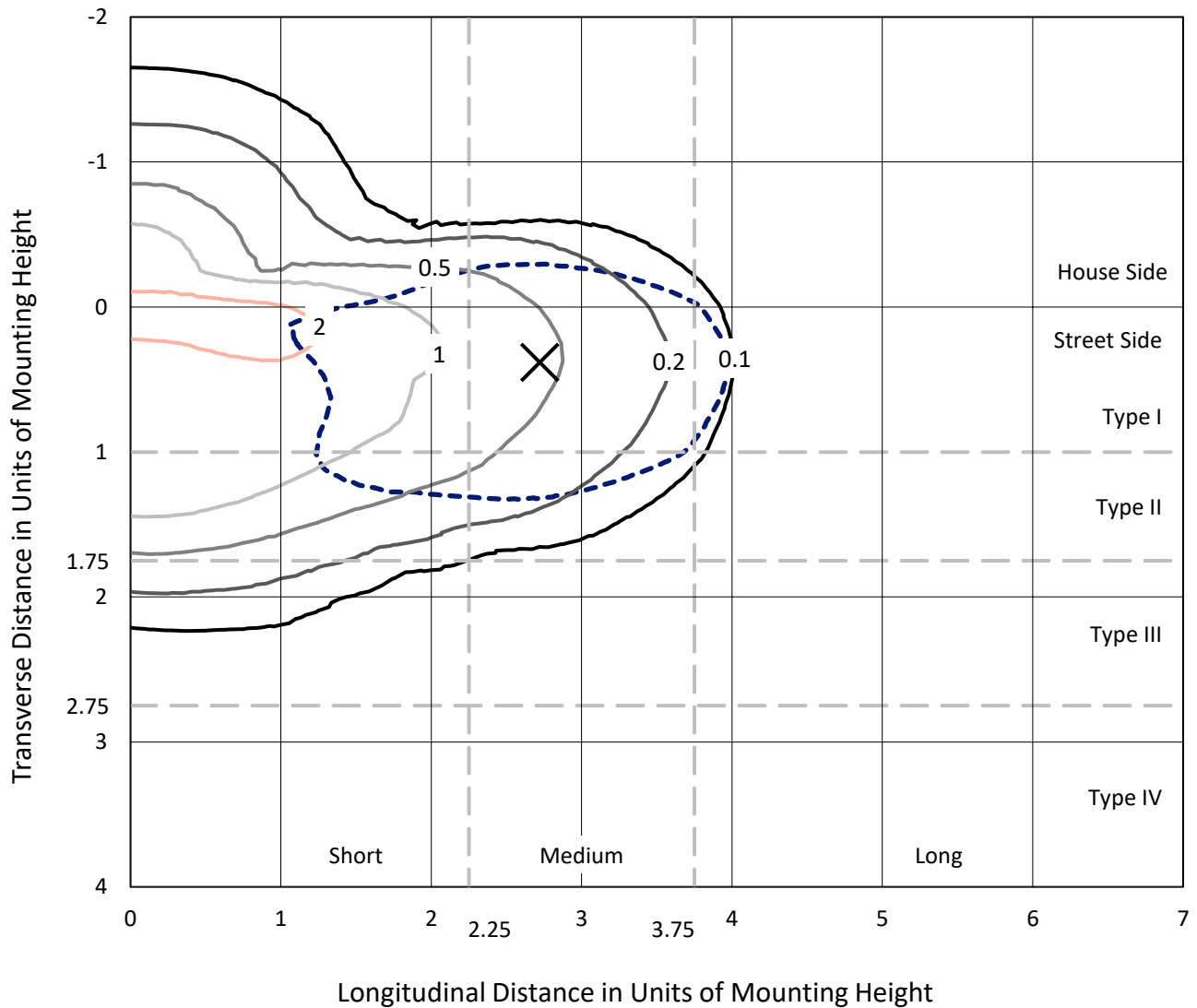
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

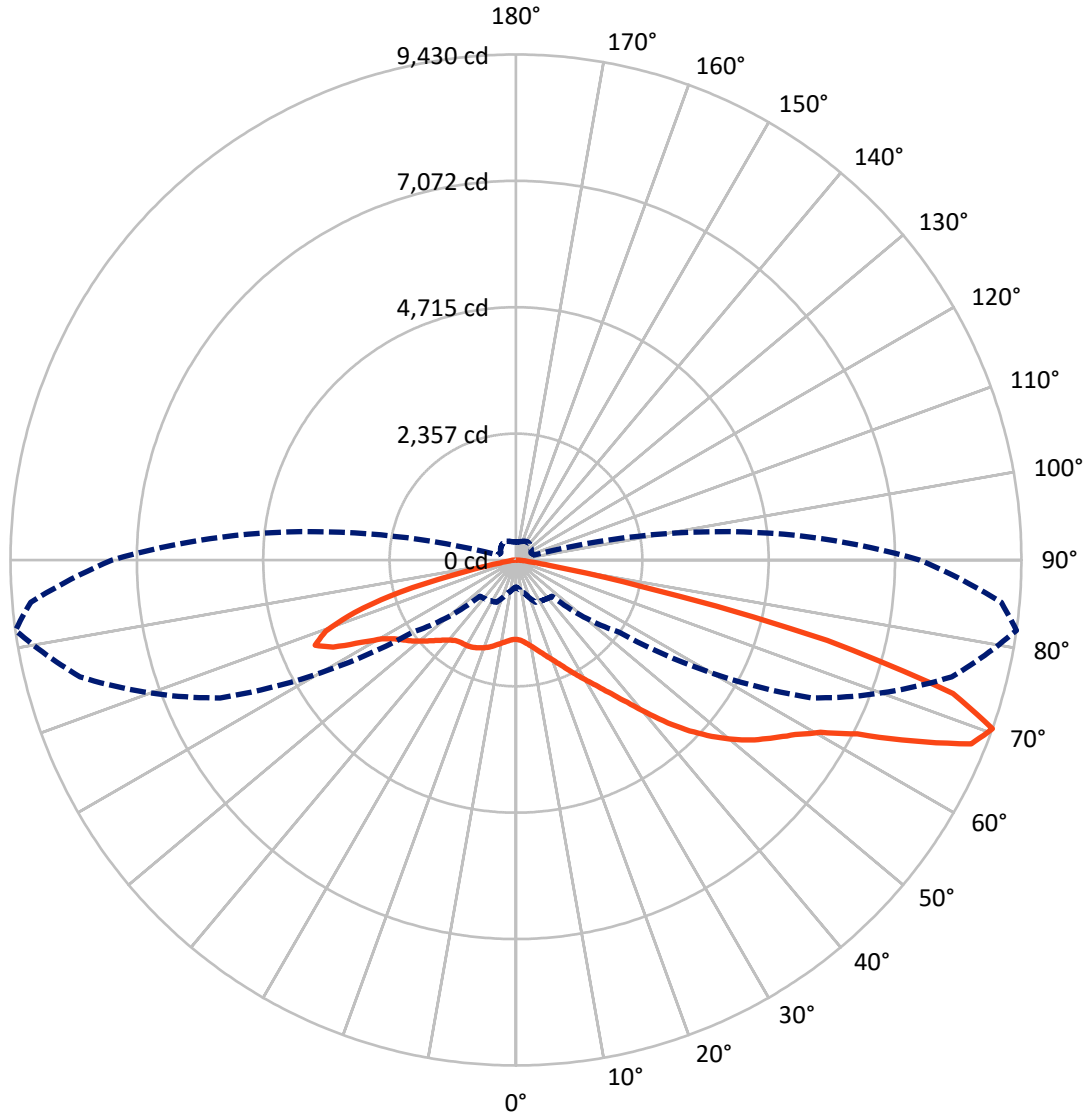
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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
House Side	Lumens	2487.7	0.0	2487.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	7603.3	0.0	7603.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	10091.0	0.0	10091.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	1.4
10°-20°	401.3	4.0
20°-30°	671.4	6.7
30°-40°	1048.9	10.4
40°-50°	1670.5	16.6
50°-60°	2324.7	23.0
60°-70°	2431.7	24.1
70°-80°	1270.9	12.6
80°-90°	132.0	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°	10091.0	100.0
0°-180°	10091.0	100.0

Coefficient of Utilization



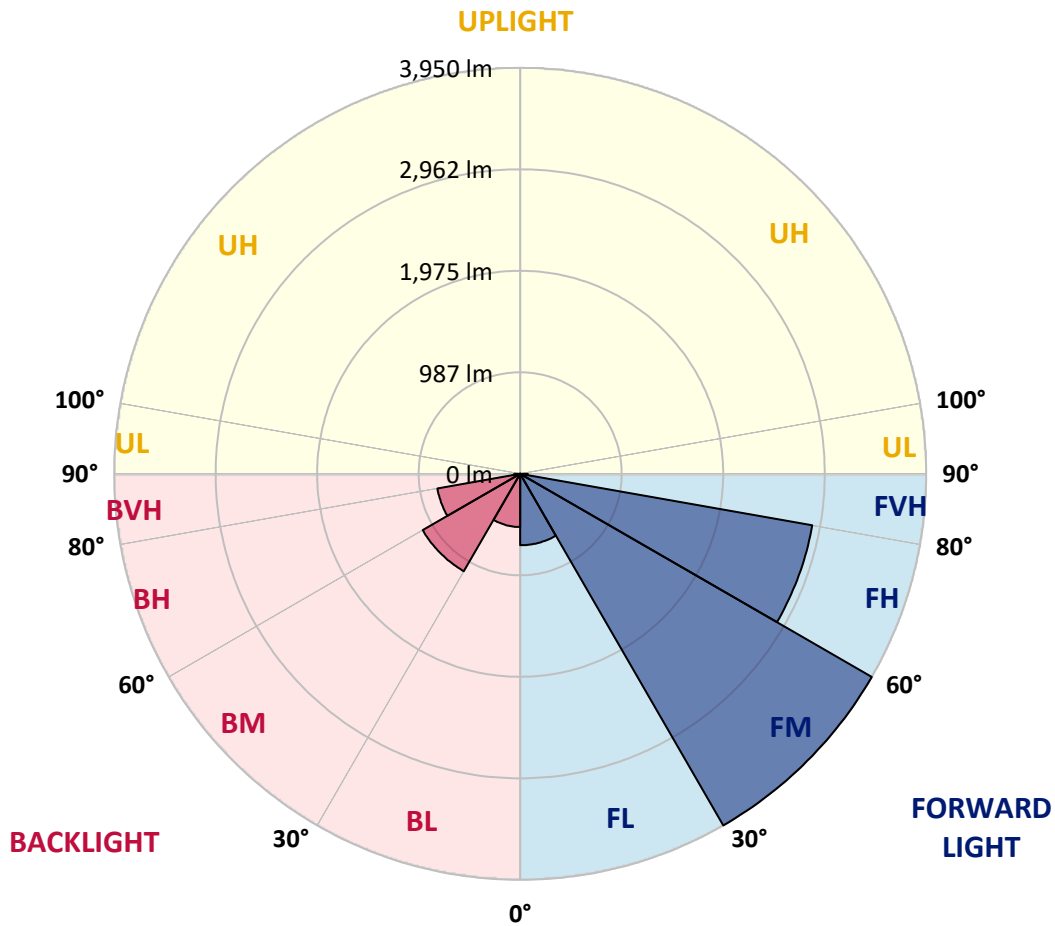
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	694.9	6.9			
FM (30°-60°)	3949.5	39.1			
FH (60°-80°)	2885.0	28.6			G2/5000
FVH (80°-90°)	73.9	0.7			G1/100
BL (0°-30°)	517.5	5.1	B2/1000		
BM (30°-60°)	1094.5	10.8	B2/2500		
BH (60°-80°)	817.6	8.1	B2/1000		G2/1000
BVH (80°-90°)	58.1	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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 CATALOG NUMBER: NAV-SB1D-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5
2.5°	1514.8	1523.4	1520.7	1518.0	1518.0	1514.3	1513.7	1508.4	1504.1	1497.1	1495.5
5°	1534.1	1543.2	1542.1	1544.3	1551.2	1552.8	1554.4	1551.2	1542.7	1534.1	1530.3
7.5°	1516.9	1527.1	1530.3	1543.2	1564.6	1583.9	1598.3	1604.2	1596.2	1583.9	1578.0
10°	1459.1	1470.4	1481.6	1512.1	1550.1	1595.7	1634.2	1657.2	1655.6	1643.9	1633.7
12.5°	1341.9	1353.6	1377.7	1437.2	1506.8	1587.1	1658.8	1707.0	1723.6	1715.1	1697.4
15°	1248.1	1258.3	1276.5	1337.6	1428.1	1550.1	1667.9	1761.7	1804.0	1799.1	1777.7
17.5°	1245.5	1249.8	1261.0	1289.9	1359.5	1492.3	1658.3	1815.2	1896.1	1895.5	1868.7
20°	1292.6	1294.2	1300.6	1306.5	1346.1	1448.4	1633.7	1859.6	1999.4	1999.4	1970.5
22.5°	1357.9	1356.8	1363.3	1357.9	1377.2	1444.7	1618.2	1898.7	2114.5	2123.1	2086.7
25°	1455.9	1450.6	1448.9	1436.6	1440.4	1479.5	1635.3	1943.2	2251.1	2268.7	2223.2
27.5°	1586.6	1578.0	1572.1	1543.7	1534.1	1551.2	1687.8	1996.7	2403.1	2433.7	2375.8
30°	1756.8	1741.3	1732.7	1683.5	1648.7	1651.3	1767.0	2067.9	2562.2	2611.4	2538.1
32.5°	1989.2	1965.1	1942.1	1861.2	1797.5	1776.6	1869.3	2166.5	2734.6	2813.3	2719.0
35°	2249.5	2230.2	2205.5	2080.8	1982.8	1934.6	2007.4	2304.1	2936.4	3061.2	2938.6
37.5°	2500.0	2483.4	2495.2	2327.1	2200.7	2130.6	2188.4	2488.8	3185.4	3369.6	3213.8
40°	2759.2	2746.4	2748.0	2587.3	2440.1	2361.4	2407.9	2720.7	3470.8	3736.4	3544.7
42.5°	3040.9	3031.2	2999.1	2856.7	2691.2	2617.8	2660.7	2988.4	3777.1	4154.1	3907.8
45°	3356.2	3350.4	3320.4	3157.1	2967.5	2885.0	2942.9	3284.0	4085.0	4547.1	4272.4
47.5°	3628.8	3633.6	3629.9	3492.2	3295.7	3174.7	3243.8	3592.4	4371.5	4916.6	4622.1
50°	3760.0	3785.1	3822.1	3779.3	3657.2	3534.0	3547.4	3890.1	4644.6	5263.0	4957.3
52.5°	3691.4	3739.1	3839.8	3908.3	3955.4	3929.7	3893.8	4185.7	4901.6	5575.7	5274.2
55°	3436.0	3503.0	3670.0	3835.5	4075.9	4262.8	4309.9	4513.4	5152.2	5850.9	5574.1
57.5°	2970.7	3079.4	3229.3	3564.0	3968.8	4423.9	4795.0	4968.0	5417.8	6144.9	5887.9
60°	2172.9	2318.5	2504.9	3002.8	3594.0	4337.7	5207.9	5666.2	5795.2	6525.6	6296.4
62.5°	1390.6	1480.5	1651.9	2120.9	2800.4	3896.0	5334.2	6539.0	6435.1	7150.0	6909.0
65°	952.0	1009.9	1166.8	1430.2	1810.4	2900.0	4995.8	7193.3	7451.4	8139.5	7956.4
67.5°	691.8	735.7	869.6	1100.4	1179.6	1716.1	3876.7	7163.3	8439.3	9159.0	8874.1
70°	504.4	535.5	647.9	869.6	907.6	954.7	2348.5	6089.2	8417.9	9429.9	9088.8
72.5°	373.7	395.2	470.7	674.7	734.6	644.7	1162.5	4425.5	7233.5	8529.3	8255.7
75°	270.4	286.5	342.2	516.2	587.9	491.0	579.9	2586.3	5045.6	5999.8	6048.0
77.5°	206.7	219.0	255.4	378.0	470.7	368.4	359.8	1189.8	2392.4	2404.2	2539.1
80°	166.0	174.0	193.8	266.1	360.9	275.8	234.5	480.3	756.1	639.9	671.5
82.5°	122.1	135.5	163.8	186.9	258.1	190.1	143.0	242.6	287.5	247.4	249.5
85°	69.6	78.7	99.1	133.9	164.9	116.2	81.9	107.6	133.9	109.8	98.0
87.5°	24.6	32.1	34.8	52.5	71.8	48.2	31.6	31.1	43.9	32.7	27.3
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: P882067
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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5	1479.5
2.5°	1490.2	1487.5	1476.8	1462.3	1447.3	1432.9	1428.1	1417.9	1410.9	1407.2	1411.5
5°	1520.2	1511.6	1486.4	1454.3	1420.6	1384.2	1358.5	1334.9	1317.8	1301.7	1308.1
7.5°	1563.0	1548.0	1504.6	1448.4	1388.4	1327.9	1283.0	1248.7	1225.7	1210.7	1213.9
10°	1612.8	1589.8	1523.4	1439.3	1346.7	1259.9	1206.9	1177.5	1163.0	1155.0	1157.1
12.5°	1670.1	1637.4	1542.7	1418.4	1283.0	1183.9	1147.5	1138.9	1139.5	1140.0	1141.1
15°	1740.8	1695.3	1558.2	1372.9	1200.0	1125.5	1119.1	1133.0	1147.5	1154.4	1153.9
17.5°	1820.6	1756.3	1560.9	1297.9	1118.6	1088.0	1108.4	1138.4	1160.3	1170.0	1172.1
20°	1906.2	1818.4	1541.6	1191.9	1051.6	1057.5	1093.9	1132.5	1156.6	1168.9	1172.1
22.5°	2004.2	1884.8	1495.5	1080.6	997.0	1024.3	1067.2	1104.6	1129.8	1142.1	1145.3
25°	2116.1	1959.2	1423.2	986.8	949.9	986.8	1029.7	1060.7	1081.1	1092.3	1095.5
27.5°	2240.4	2036.9	1326.9	912.4	908.7	948.3	983.6	1007.7	1018.4	1027.0	1030.2
30°	2365.1	2107.6	1210.1	856.2	872.8	910.3	935.4	946.2	949.4	951.0	954.7
32.5°	2500.0	2168.6	1087.5	809.6	838.5	873.3	888.3	893.1	878.1	868.0	871.2
35°	2663.4	2233.9	967.6	772.7	804.8	834.8	839.6	835.3	817.6	796.8	797.8
37.5°	2865.2	2315.3	871.7	746.4	773.2	793.0	787.1	786.1	787.7	763.0	764.6
40°	3112.6	2421.3	801.6	726.1	747.5	751.8	735.2	744.3	752.3	714.8	715.9
42.5°	3387.3	2549.3	757.1	712.2	726.1	715.9	690.2	700.4	699.3	650.0	649.5
45°	3667.3	2688.5	741.6	702.0	706.3	685.9	657.5	660.2	637.7	593.3	594.9
47.5°	3945.8	2837.9	751.2	693.4	681.6	658.6	636.7	624.9	591.7	558.5	558.5
50°	4218.9	2994.8	786.6	676.3	647.9	634.5	618.5	597.6	562.2	533.9	531.7
52.5°	4472.1	3152.8	826.2	647.9	605.6	613.6	603.5	579.4	544.6	515.6	516.2
55°	4712.0	3310.7	841.7	608.8	566.0	595.4	589.5	545.1	503.3	479.8	477.6
57.5°	4973.3	3500.8	824.6	559.0	533.9	574.5	552.1	502.8	478.7	461.0	459.4
60°	5335.3	3799.1	787.7	497.4	503.3	543.5	504.9	484.6	458.4	438.5	437.5
62.5°	5936.6	4355.4	728.2	436.4	467.5	497.4	482.4	462.1	435.3	416.0	416.0
65°	6825.5	5128.6	616.3	388.7	427.3	452.5	458.4	438.0	410.2	389.8	390.9
67.5°	7575.1	5613.7	466.4	349.1	386.1	416.0	432.6	412.8	383.4	363.6	364.1
70°	7533.9	5261.4	356.1	310.0	349.7	380.2	401.6	386.1	354.5	335.7	337.3
72.5°	6691.6	4401.5	288.1	270.4	312.7	342.7	368.4	356.6	324.5	306.3	306.3
75°	4916.0	3124.4	230.2	230.2	266.7	303.6	332.0	324.5	295.0	282.2	278.4
77.5°	2072.2	1310.8	180.4	191.2	221.7	260.8	296.1	298.8	273.1	289.1	262.4
80°	551.0	361.4	137.6	150.5	174.0	215.3	257.6	256.5	228.6	213.6	198.7
82.5°	209.9	142.4	98.0	106.0	125.8	164.9	204.0	210.4	182.6	158.0	158.0
85°	80.9	61.0	60.5	63.7	73.4	109.2	154.2	159.6	137.6	116.7	120.5
87.5°	20.9	18.2	22.5	21.4	33.7	58.4	88.4	91.6	84.1	48.7	69.6
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)