

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: P882057

Luminaire Tested: **NAV-SB1D-730-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882057
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-730-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9934 lumens
Efficiency: N/A
Efficacy: 124.8 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

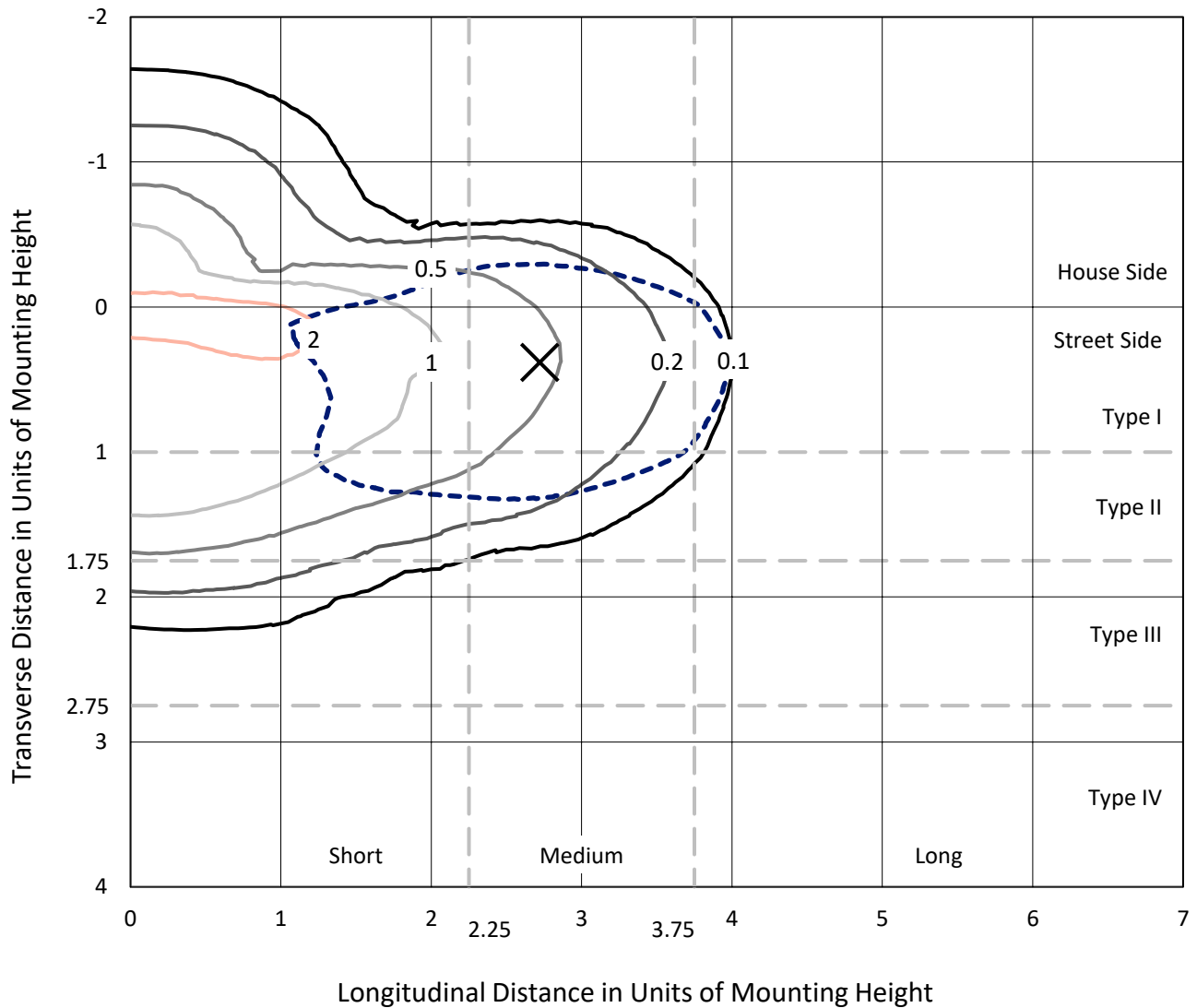
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

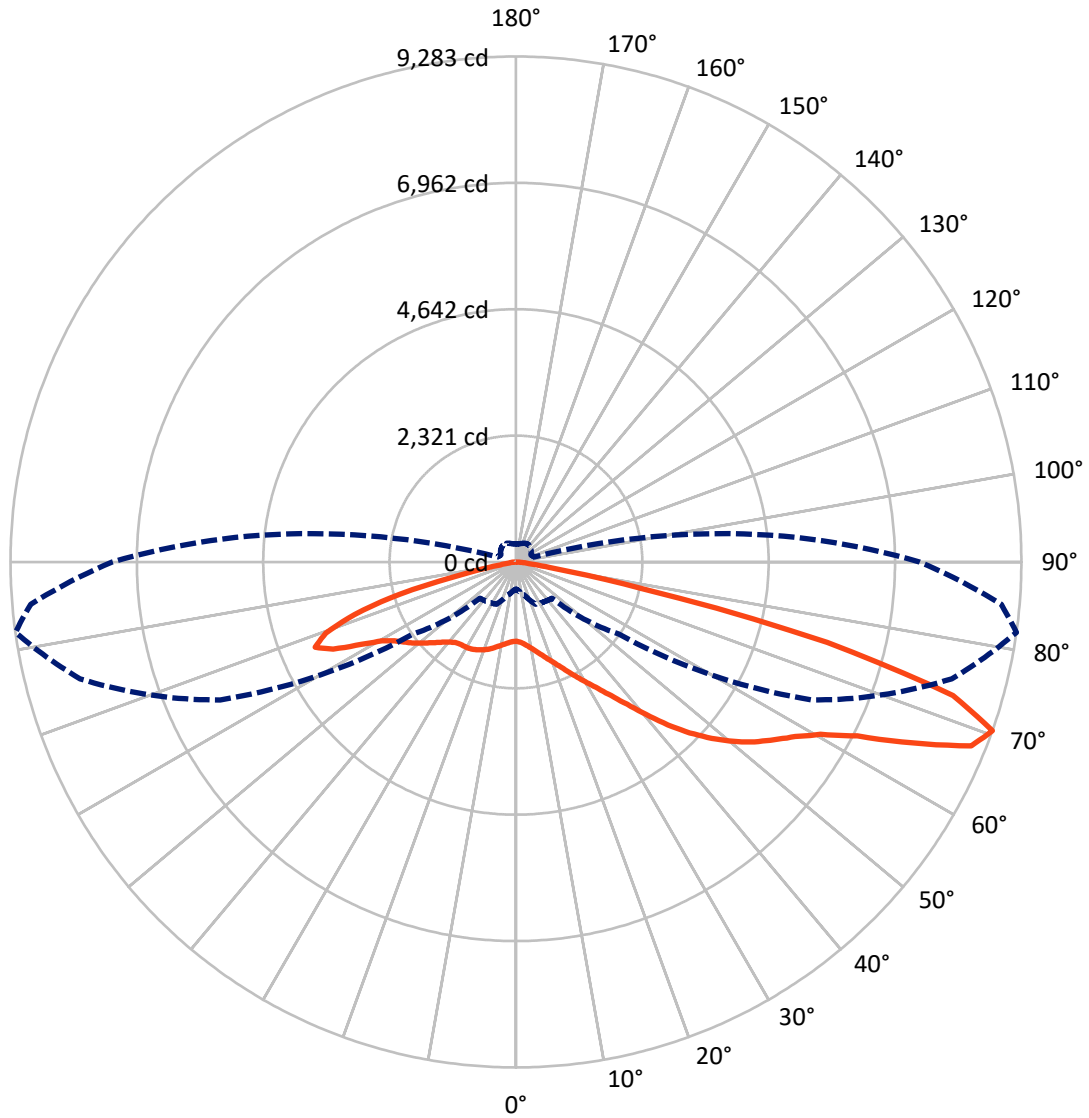
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type II - Medium - N/A

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CATALOG NUMBER: NAV-SB1D-730-U-T2

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	2449.0	0.0	2449.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	7485.0	0.0	7485.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	9934.0	0.0	9934.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	1.4
10°-20°	395.1	4.0
20°-30°	660.9	6.7
30°-40°	1032.6	10.4
40°-50°	1644.5	16.6
50°-60°	2288.5	23.0
60°-70°	2393.9	24.1
70°-80°	1251.2	12.6
80°-90°	129.9	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°	9934.0	100.0
0°-180°	9934.0	100.0

Coefficient of Utilization

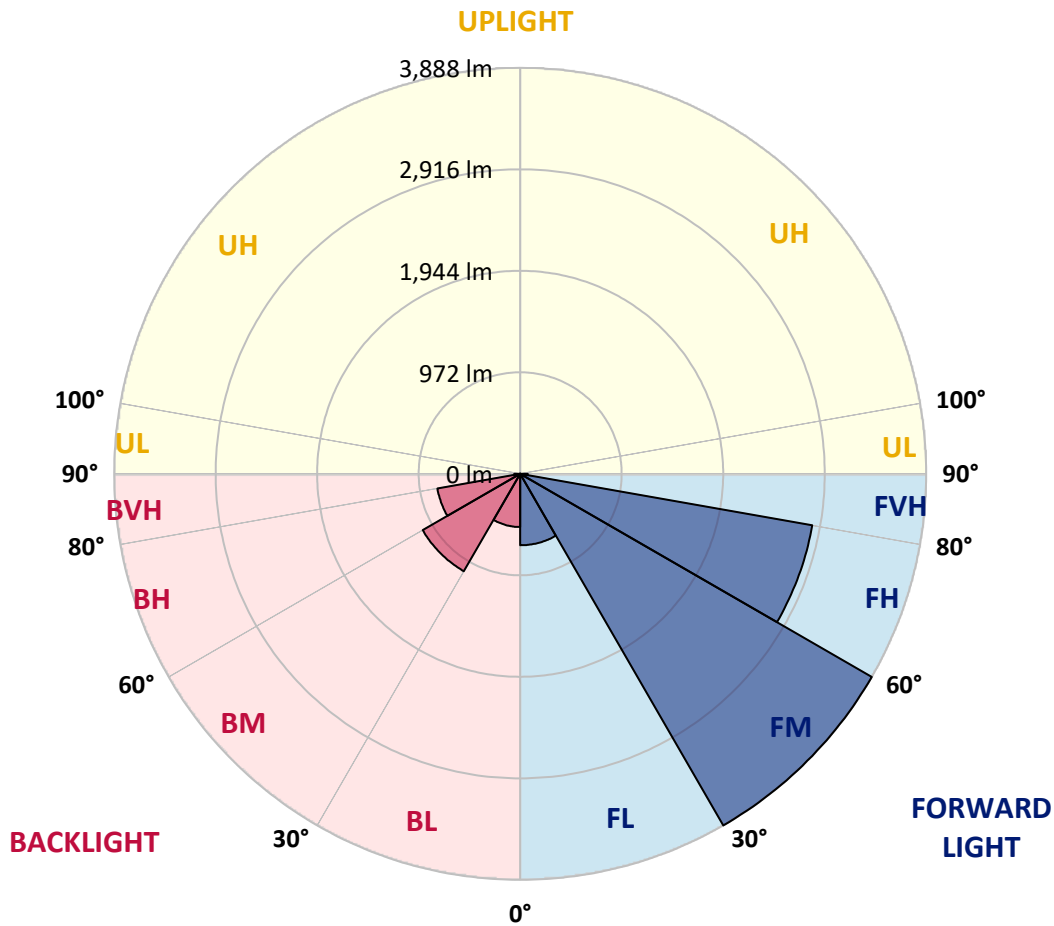


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	684.1	6.9			
FM (30°-60°)	3888.1	39.1			
FH (60°-80°)	2840.2	28.6			G2/5000
FVH (80°-90°)	72.7	0.7			G1/100
BL (0°-30°)	509.5	5.1	B2/1000		
BM (30°-60°)	1077.5	10.8	B2/2500		
BH (60°-80°)	804.9	8.1	B2/1000		G2/1000
BVH (80°-90°)	57.2	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°	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4
2.5°	1491.2	1499.7	1497.0	1494.4	1494.4	1490.7	1490.2	1484.9	1480.7	1473.8	1472.3
5°	1510.2	1519.2	1518.1	1520.2	1527.1	1528.7	1530.2	1527.1	1518.6	1510.2	1506.5
7.5°	1493.3	1503.4	1506.5	1519.2	1540.3	1559.2	1573.5	1579.3	1571.4	1559.2	1553.4
10°	1436.4	1447.5	1458.6	1488.6	1526.0	1570.8	1608.8	1631.5	1629.9	1618.3	1608.3
12.5°	1321.0	1332.6	1356.3	1414.8	1483.3	1562.4	1633.0	1680.5	1696.8	1688.4	1671.0
15°	1228.7	1238.7	1256.7	1316.8	1405.8	1526.0	1642.0	1734.2	1775.9	1771.1	1750.1
17.5°	1226.1	1230.3	1241.4	1269.8	1338.4	1469.1	1632.5	1787.0	1866.6	1866.0	1839.7
20°	1272.5	1274.1	1280.4	1286.2	1325.2	1425.9	1608.3	1830.7	1968.3	1968.3	1939.8
22.5°	1336.8	1335.7	1342.1	1336.8	1355.8	1422.2	1593.0	1869.2	2081.6	2090.1	2054.2
25°	1433.3	1428.0	1426.4	1414.3	1418.0	1456.4	1609.8	1912.9	2216.0	2233.4	2188.6
27.5°	1561.9	1553.4	1547.6	1519.7	1510.2	1527.1	1661.5	1965.7	2365.7	2395.8	2338.9
30°	1729.5	1714.2	1705.8	1657.3	1623.0	1625.7	1739.5	2035.8	2522.3	2570.8	2498.6
32.5°	1958.3	1934.6	1911.9	1832.3	1769.6	1749.0	1840.2	2132.8	2692.0	2769.5	2676.7
35°	2214.5	2195.5	2171.2	2048.4	1951.9	1904.5	1976.2	2268.2	2890.8	3013.6	2892.9
37.5°	2461.2	2444.8	2456.4	2290.9	2166.5	2097.4	2154.4	2450.1	3135.9	3317.2	3163.8
40°	2716.3	2703.6	2705.2	2547.1	2402.1	2324.6	2370.5	2678.3	3416.8	3678.3	3489.6
42.5°	2993.5	2984.1	2952.4	2812.2	2649.3	2577.1	2619.3	2941.9	3718.3	4089.4	3847.0
45°	3304.0	3298.2	3268.7	3107.9	2921.3	2840.2	2897.1	3232.9	4021.4	4476.4	4205.9
47.5°	3572.3	3577.1	3573.4	3437.9	3244.5	3125.3	3193.3	3536.5	4303.5	4840.1	4550.2
50°	3701.5	3726.3	3762.6	3720.5	3600.3	3479.0	3492.2	3829.6	4572.3	5181.1	4880.1
52.5°	3634.0	3680.9	3780.0	3847.5	3893.9	3868.6	3833.3	4120.5	4825.3	5489.0	5192.2
55°	3382.6	3448.5	3612.9	3775.8	4012.5	4196.4	4242.8	4443.1	5072.0	5759.9	5487.4
57.5°	2924.5	3031.5	3179.1	3508.5	3907.1	4355.1	4720.4	4890.7	5333.5	6049.3	5796.3
60°	2139.1	2282.5	2465.9	2956.1	3538.1	4270.2	5126.8	5578.0	5705.1	6424.1	6198.5
62.5°	1368.9	1457.5	1626.2	2087.9	2756.9	3835.4	5251.2	6437.3	6335.0	7038.7	6801.5
65°	937.2	994.2	1148.6	1408.0	1782.2	2854.9	4918.1	7081.4	7335.5	8012.8	7832.6
67.5°	681.0	724.3	856.1	1083.2	1161.3	1689.4	3816.4	7051.9	8308.0	9016.5	8736.1
70°	496.6	527.1	637.8	856.1	893.5	939.9	2312.0	5994.5	8286.9	9283.2	8947.4
72.5°	367.9	389.0	463.3	664.2	723.2	634.7	1144.4	4356.7	7120.9	8396.6	8127.2
75°	266.2	282.0	336.8	508.1	578.8	483.4	570.9	2546.0	4967.1	5906.4	5953.9
77.5°	203.5	215.6	251.4	372.2	463.3	362.7	354.2	1171.3	2355.2	2366.8	2499.6
80°	163.4	171.3	190.8	262.0	355.3	271.5	230.9	472.8	744.3	629.9	661.0
82.5°	120.2	133.4	161.3	184.0	254.1	187.1	140.7	238.8	283.1	243.5	245.6
85°	68.5	77.5	97.5	131.8	162.4	114.4	80.7	106.0	131.8	108.1	96.5
87.5°	24.2	31.6	34.3	51.7	70.6	47.4	31.1	30.6	43.2	32.2	26.9
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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 CATALOG NUMBER: NAV-SB1D-730-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4	1456.4
2.5°	1467.0	1464.4	1453.8	1439.6	1424.8	1410.6	1405.8	1395.8	1389.0	1385.3	1389.5
5°	1496.5	1488.1	1463.3	1431.7	1398.5	1362.6	1337.3	1314.1	1297.3	1281.4	1287.8
7.5°	1538.7	1523.9	1481.2	1425.9	1366.8	1307.3	1263.0	1229.3	1206.6	1191.8	1195.0
10°	1587.7	1565.0	1499.7	1416.9	1325.7	1240.3	1188.1	1159.1	1144.9	1137.0	1139.1
12.5°	1644.1	1612.0	1518.6	1396.4	1263.0	1165.5	1129.6	1121.2	1121.7	1122.3	1123.3
15°	1713.7	1668.9	1533.9	1351.6	1181.3	1108.0	1101.7	1115.4	1129.6	1136.5	1136.0
17.5°	1792.2	1729.0	1536.6	1277.8	1101.2	1071.1	1091.2	1120.7	1142.3	1151.8	1153.9
20°	1876.6	1790.1	1517.6	1173.4	1035.3	1041.1	1076.9	1114.9	1138.6	1150.7	1153.9
22.5°	1973.0	1855.5	1472.3	1063.7	981.5	1008.4	1050.6	1087.5	1112.2	1124.4	1127.5
25°	2083.2	1928.8	1401.1	971.5	935.1	971.5	1013.7	1044.2	1064.3	1075.3	1078.5
27.5°	2205.5	2005.2	1306.2	898.2	894.5	933.5	968.3	992.1	1002.6	1011.0	1014.2
30°	2328.3	2074.8	1191.3	842.9	859.2	896.1	920.9	931.4	934.6	936.2	939.9
32.5°	2461.2	2134.9	1070.6	797.0	825.5	859.7	874.5	879.2	864.5	854.5	857.6
35°	2621.9	2199.2	952.5	760.6	792.3	821.8	826.5	822.3	804.9	784.4	785.4
37.5°	2820.7	2279.3	858.2	734.8	761.2	780.7	774.9	773.8	775.4	751.2	752.7
40°	3064.2	2383.7	789.1	714.8	735.9	740.1	723.7	732.7	740.6	703.7	704.8
42.5°	3334.6	2509.6	745.4	701.1	714.8	704.8	679.5	689.5	688.4	639.9	639.4
45°	3610.3	2646.7	730.1	691.1	695.3	675.2	647.3	649.9	627.8	584.1	585.6
47.5°	3884.4	2793.8	739.6	682.6	671.0	648.4	626.8	615.2	582.5	549.8	549.8
50°	4153.2	2948.2	774.3	665.8	637.8	624.6	608.8	588.3	553.5	525.5	523.4
52.5°	4402.6	3103.7	813.4	637.8	596.2	604.1	594.1	570.4	536.1	507.6	508.1
55°	4638.7	3259.2	828.6	599.3	557.2	586.2	580.4	536.6	495.5	472.3	470.2
57.5°	4895.9	3446.3	811.8	550.3	525.5	565.6	543.5	495.0	471.3	453.9	452.3
60°	5252.3	3740.0	775.4	489.7	495.5	535.0	497.1	477.0	451.2	431.7	430.7
62.5°	5844.2	4287.6	716.9	429.6	460.2	489.7	474.9	454.9	428.6	409.6	409.6
65°	6719.3	5048.8	606.7	382.7	420.6	445.4	451.2	431.2	403.8	383.7	384.8
67.5°	7457.2	5526.4	459.1	343.7	380.1	409.6	425.9	406.4	377.4	357.9	358.4
70°	7416.7	5179.5	350.5	305.2	344.2	374.3	395.3	380.1	349.0	330.5	332.1
72.5°	6587.5	4333.0	283.6	266.2	307.8	337.4	362.7	351.1	319.4	301.5	301.5
75°	4839.5	3075.8	226.7	226.7	262.5	298.9	326.8	319.4	290.4	277.8	274.1
77.5°	2040.0	1290.4	177.6	188.2	218.2	256.7	291.5	294.1	268.8	284.6	258.3
80°	542.4	355.8	135.5	148.1	171.3	211.9	253.5	252.5	225.1	210.3	195.6
82.5°	206.6	140.2	96.5	104.4	123.9	162.4	200.8	207.2	179.7	155.5	155.5
85°	79.6	60.1	59.6	62.7	72.2	107.5	151.8	157.1	135.5	114.9	118.6
87.5°	20.6	17.9	22.1	21.1	33.2	57.5	87.0	90.1	82.8	48.0	68.5
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)