

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: P882639

Luminaire Tested: **NAV-SB2C-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12887 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

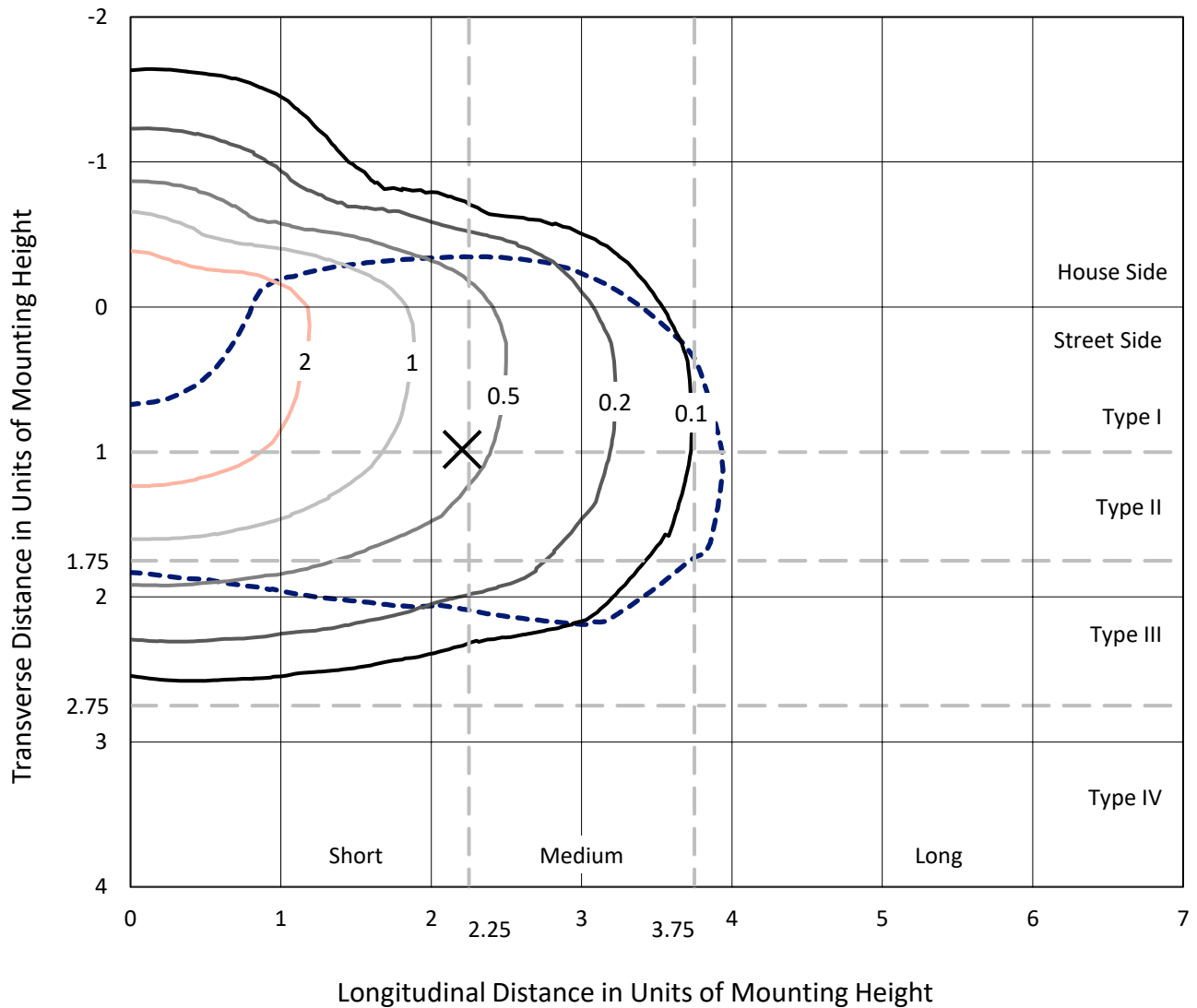
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

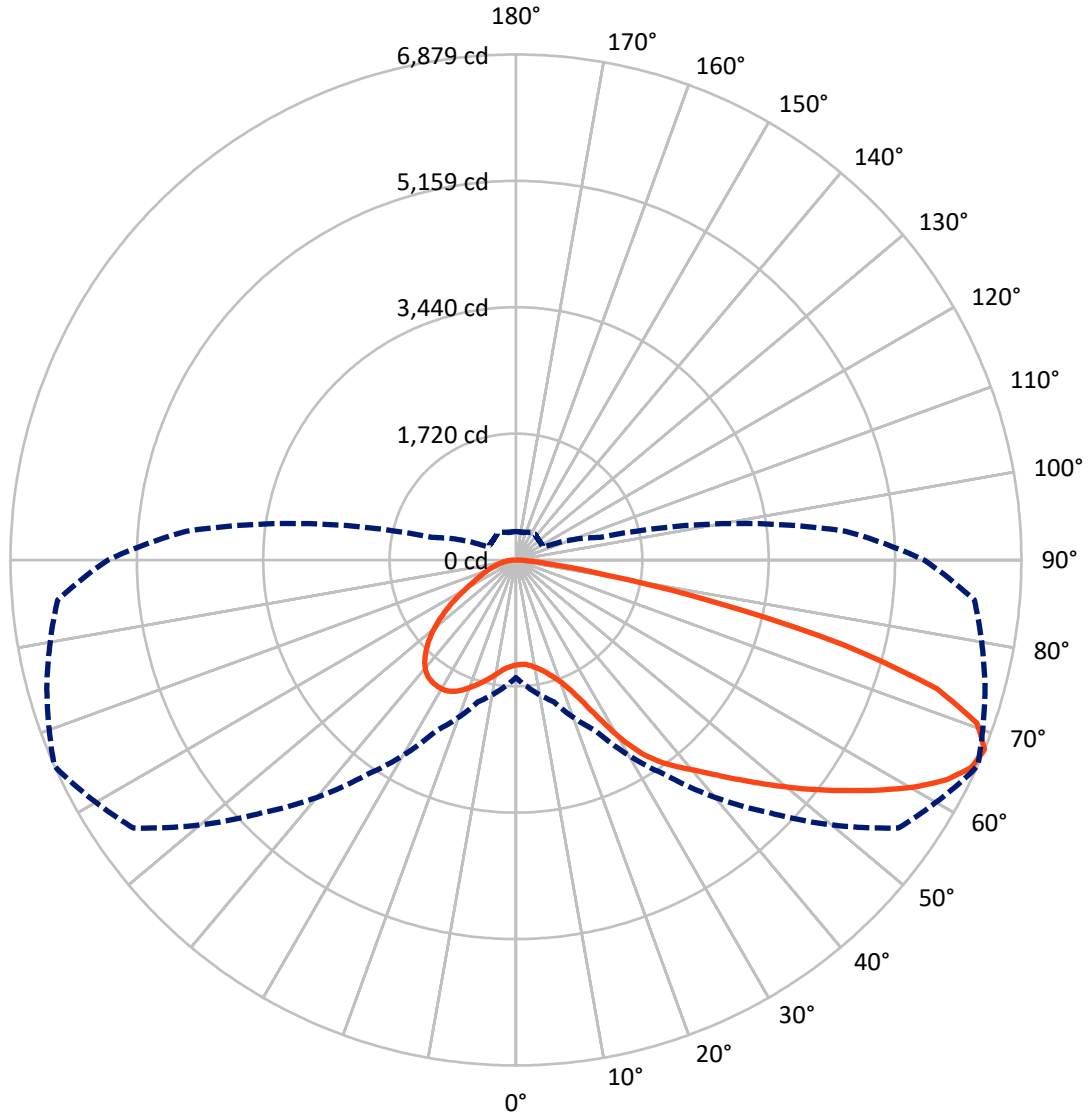
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3204.3	0.0	3204.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	9682.7	0.0	9682.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	12887.0	0.0	12887.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	1.1
10°-20°	468.2	3.6
20°-30°	902.4	7.0
30°-40°	1582.3	12.3
40°-50°	2352.4	18.3
50°-60°	2981.8	23.1
60°-70°	2917.7	22.6
70°-80°	1391.7	10.8
80°-90°	148.7	1.2
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°	12887.0	100.0
0°-180°	12887.0	100.0

Coefficient of Utilization



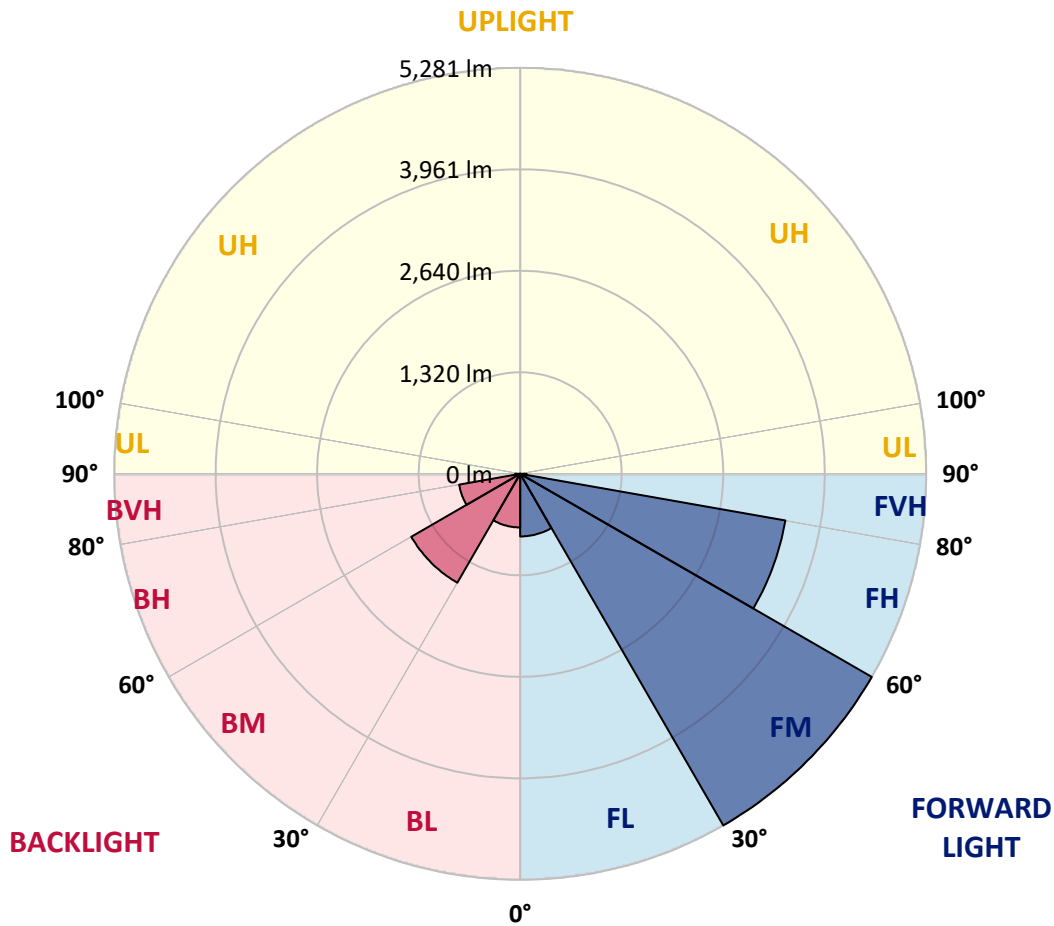
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	814.3	6.3			
FM (30°-60°)	5281.0	41.0			
FH (60°-80°)	3503.0	27.2			G2/5000
FVH (80°-90°)	84.3	0.7			G1/100
BL (0°-30°)	698.0	5.4	B2/1000		
BM (30°-60°)	1635.5	12.7	B2/2500		
BH (60°-80°)	806.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	64.4	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3
2.5°	1414.4	1422.6	1420.5	1417.2	1416.5	1417.8	1419.9	1421.9	1421.2	1424.6	1430.0
5°	1410.4	1418.5	1417.8	1417.8	1420.5	1426.0	1429.3	1432.7	1429.3	1433.4	1440.8
7.5°	1413.1	1419.2	1421.9	1424.6	1431.4	1441.5	1449.7	1457.1	1453.0	1457.8	1467.3
10°	1447.6	1452.4	1455.1	1455.1	1459.8	1471.3	1479.4	1493.0	1489.6	1497.0	1509.2
12.5°	1510.6	1515.3	1515.3	1512.6	1516.0	1523.5	1526.2	1541.1	1535.0	1547.2	1559.3
15°	1587.8	1597.3	1589.8	1585.1	1586.4	1593.9	1593.2	1604.7	1598.6	1608.8	1619.6
17.5°	1673.1	1685.3	1673.1	1672.4	1669.7	1677.8	1678.5	1688.7	1677.8	1685.3	1692.7
20°	1774.0	1790.9	1780.7	1784.1	1778.0	1781.4	1784.8	1799.7	1782.8	1788.2	1786.2
22.5°	1916.2	1936.5	1925.6	1938.5	1934.4	1931.7	1931.1	1957.5	1931.1	1933.1	1913.5
25°	2123.4	2147.7	2128.8	2146.4	2146.4	2155.2	2165.3	2199.2	2155.2	2142.3	2091.5
27.5°	2429.4	2453.8	2416.5	2427.4	2424.0	2445.7	2434.8	2518.8	2471.4	2450.4	2348.2
30°	2797.7	2841.1	2770.7	2767.9	2764.6	2799.1	2814.7	2870.2	2822.1	2801.1	2677.9
32.5°	3195.9	3241.2	3157.3	3132.9	3120.0	3141.0	3128.2	3172.8	3139.7	3107.2	2954.8
35°	3617.0	3661.7	3581.8	3534.4	3483.0	3438.9	3392.9	3404.4	3373.3	3323.8	3166.1
37.5°	4015.1	4097.1	4012.4	3961.7	3866.9	3780.9	3652.2	3598.7	3569.6	3524.3	3365.1
40°	4420.7	4467.4	4403.1	4359.8	4256.9	4122.1	3916.3	3803.2	3763.9	3719.9	3585.2
42.5°	4719.3	4764.0	4729.5	4699.7	4619.1	4462.7	4196.6	4055.1	3998.2	3948.8	3834.4
45°	4956.3	4989.5	4967.8	4978.6	4944.1	4792.4	4487.1	4325.3	4266.3	4206.1	4116.0
47.5°	5051.8	5087.0	5121.5	5185.8	5244.7	5133.0	4799.2	4617.8	4555.5	4493.9	4405.2
50°	5040.9	5076.8	5177.0	5313.8	5496.6	5459.4	5128.3	4929.2	4871.7	4801.3	4719.3
52.5°	4954.3	4994.9	5123.5	5351.0	5642.2	5703.8	5463.4	5250.8	5196.7	5112.7	5030.8
55°	4726.8	4751.1	4944.1	5266.4	5676.7	5874.4	5791.8	5593.4	5539.3	5422.1	5332.8
57.5°	4304.9	4340.2	4621.1	5038.2	5590.1	5990.2	6080.3	5953.7	5901.5	5732.9	5639.5
60°	3754.5	3810.7	4132.3	4655.0	5369.3	5989.5	6342.3	6307.8	6264.4	6039.0	5941.5
62.5°	3131.5	3196.5	3506.0	4113.3	4983.4	5819.6	6506.2	6604.3	6582.0	6321.3	6196.7
65°	2405.0	2449.7	2757.8	3412.5	4382.8	5454.6	6525.1	6806.8	6810.9	6536.0	6330.1
67.5°	1601.3	1730.0	1997.4	2560.8	3578.4	4858.1	6358.6	6840.0	6879.2	6609.8	6263.1
70°	781.4	950.6	1212.7	1664.3	2560.8	3943.4	5923.2	6567.8	6655.1	6394.4	5863.6
72.5°	324.3	379.2	522.0	821.3	1470.0	2661.0	5048.4	5829.8	5991.6	5665.9	4929.9
75°	218.7	237.0	298.6	421.2	669.6	1312.2	3640.7	4346.9	4607.6	4279.2	3497.9
77.5°	168.6	180.1	217.3	294.5	398.1	496.3	1948.7	2619.7	2754.4	2549.9	1820.0
80°	132.7	141.5	162.5	214.6	282.3	265.4	664.2	1186.9	1264.8	1061.0	585.0
82.5°	115.1	118.5	116.5	145.6	187.6	155.1	218.0	438.1	483.4	350.7	190.9
85°	83.3	92.8	96.8	90.1	99.5	78.5	89.4	155.1	170.6	152.3	107.7
87.5°	33.9	50.1	61.6	58.2	36.6	22.3	27.8	45.4	52.1	56.9	35.2
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°	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3	1429.3
2.5°	1430.7	1435.4	1438.8	1442.9	1445.6	1449.7	1457.8	1462.5	1463.2	1466.6	1465.9
5°	1443.6	1450.3	1457.8	1468.6	1480.8	1491.0	1506.5	1517.4	1521.4	1524.8	1524.1
7.5°	1471.3	1480.8	1494.3	1513.3	1530.9	1544.4	1563.4	1576.3	1589.1	1593.9	1594.5
10°	1512.6	1526.2	1545.8	1571.5	1590.5	1608.1	1627.7	1638.6	1651.4	1656.8	1659.5
12.5°	1564.1	1578.3	1604.0	1639.9	1657.5	1669.7	1676.5	1673.8	1676.5	1681.2	1682.6
15°	1623.0	1638.6	1667.7	1706.3	1718.5	1707.6	1692.7	1679.2	1677.2	1678.5	1683.2
17.5°	1692.7	1704.2	1738.1	1770.6	1761.8	1717.1	1684.6	1662.9	1652.1	1648.7	1653.5
20°	1790.2	1790.2	1818.0	1838.3	1779.4	1703.6	1652.8	1617.6	1595.2	1585.7	1583.7
22.5°	1908.7	1897.9	1915.5	1901.3	1776.0	1665.6	1595.2	1534.3	1500.4	1486.9	1484.9
25°	2059.0	2046.2	2041.4	1953.4	1751.6	1605.4	1491.0	1417.2	1387.4	1379.9	1381.3
27.5°	2285.9	2253.4	2191.7	1981.8	1706.9	1510.6	1369.1	1300.7	1283.8	1284.4	1286.5
30°	2587.8	2522.8	2371.8	1986.6	1633.8	1376.5	1244.5	1195.7	1187.6	1191.0	1202.5
32.5°	2867.5	2805.9	2556.0	1964.9	1521.4	1245.2	1132.8	1100.3	1088.1	1092.1	1097.6
35°	3086.9	3069.9	2726.6	1934.4	1383.3	1121.9	1032.6	1004.8	981.1	975.7	979.8
37.5°	3294.0	3287.3	2854.6	1891.8	1246.5	1034.6	952.0	915.4	880.9	861.9	862.6
40°	3521.5	3514.8	2938.6	1826.1	1125.3	958.8	879.5	831.5	788.8	754.3	757.7
42.5°	3777.5	3737.5	2978.5	1732.0	1022.4	894.4	820.6	755.6	699.4	667.6	669.6
45°	4057.1	3967.1	2977.8	1612.2	935.7	835.5	757.7	665.6	613.4	583.7	582.3
47.5°	4353.7	4186.5	2941.3	1479.4	851.8	770.5	660.2	589.7	555.2	536.9	532.9
50°	4659.7	4391.6	2879.0	1327.1	765.8	696.7	599.2	551.2	524.7	507.8	501.7
52.5°	4947.5	4577.8	2803.8	1154.4	678.4	625.0	572.1	534.9	507.1	488.2	480.1
55°	5215.0	4738.3	2697.5	977.7	607.4	576.9	559.3	528.1	496.3	474.0	465.2
57.5°	5452.6	4842.6	2514.0	811.8	556.6	543.7	545.7	516.6	480.1	461.1	448.9
60°	5650.3	4919.1	2242.5	658.1	515.3	511.2	524.7	495.0	452.3	430.6	421.2
62.5°	5768.8	4917.7	1909.4	539.0	480.1	481.4	497.0	467.9	424.5	404.2	398.1
65°	5758.7	4797.2	1543.8	461.1	446.2	447.6	467.9	438.1	401.5	389.3	388.7
67.5°	5554.9	4503.3	1184.2	410.3	409.0	415.1	438.8	417.8	387.3	385.9	388.0
70°	5003.0	3893.3	853.1	369.7	370.4	379.2	410.3	404.9	379.8	382.6	381.9
72.5°	4011.8	2968.4	572.8	327.0	327.7	341.9	383.2	394.7	372.4	408.3	413.7
75°	2671.8	1851.2	368.3	281.7	282.3	300.6	359.5	375.1	352.1	406.9	410.3
77.5°	1283.8	832.1	266.8	237.0	237.0	253.9	310.8	335.8	300.0	316.2	289.8
80°	443.5	312.8	209.9	190.9	186.9	198.4	262.0	291.1	258.6	238.3	223.4
82.5°	174.7	162.5	168.6	148.3	134.7	142.2	203.8	240.4	190.3	172.0	171.3
85°	100.2	105.6	119.2	98.2	77.9	87.3	149.6	172.7	143.5	126.6	129.3
87.5°	27.1	37.2	54.8	50.8	35.2	37.2	71.1	95.5	82.6	63.6	65.7
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)