

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: P882619

Luminaire Tested: **NAV-SB2C-827-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882619  
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-827-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

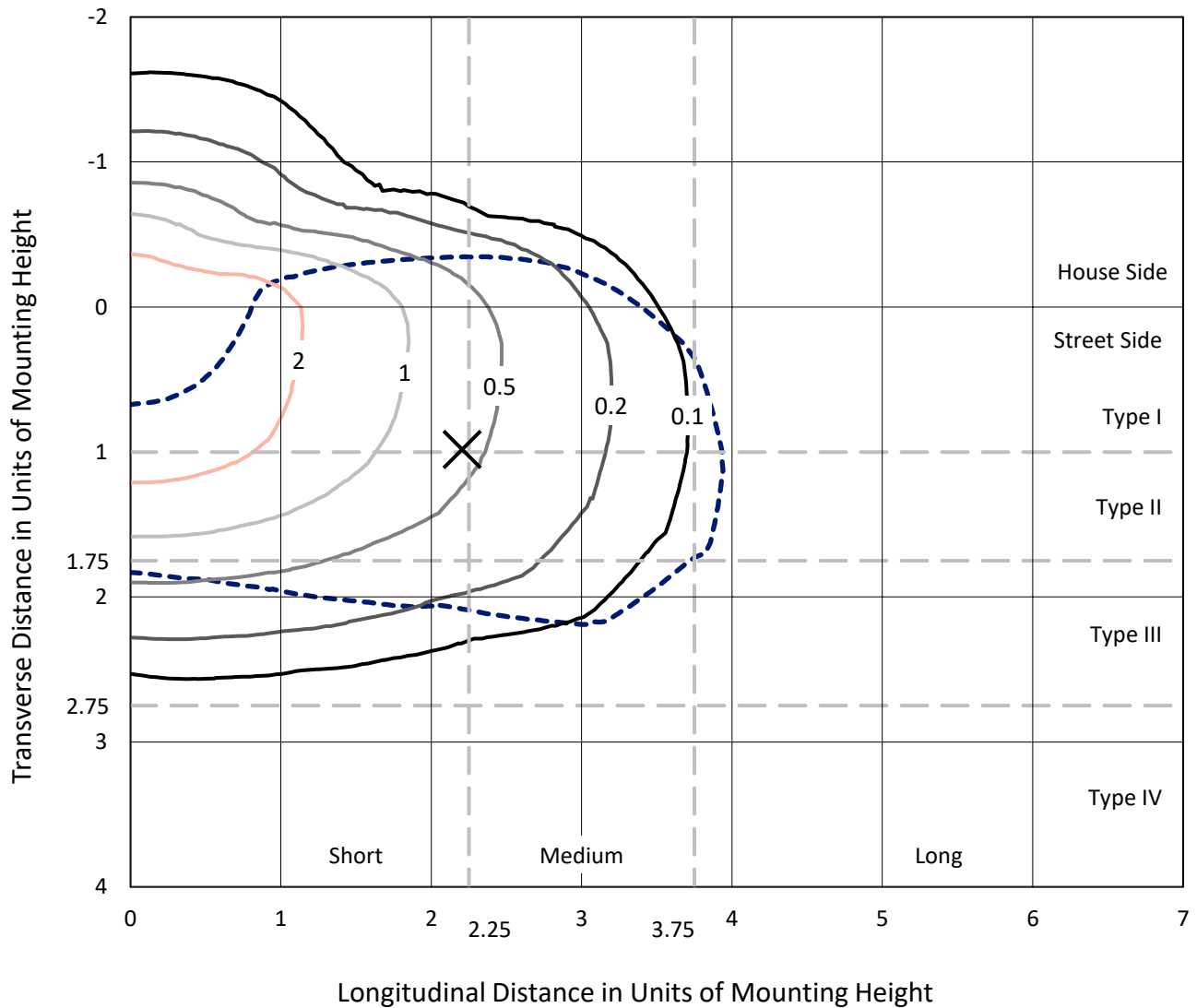
Lumens per Lamp: N/A  
Luminaire Lumens: 12410 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 100.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

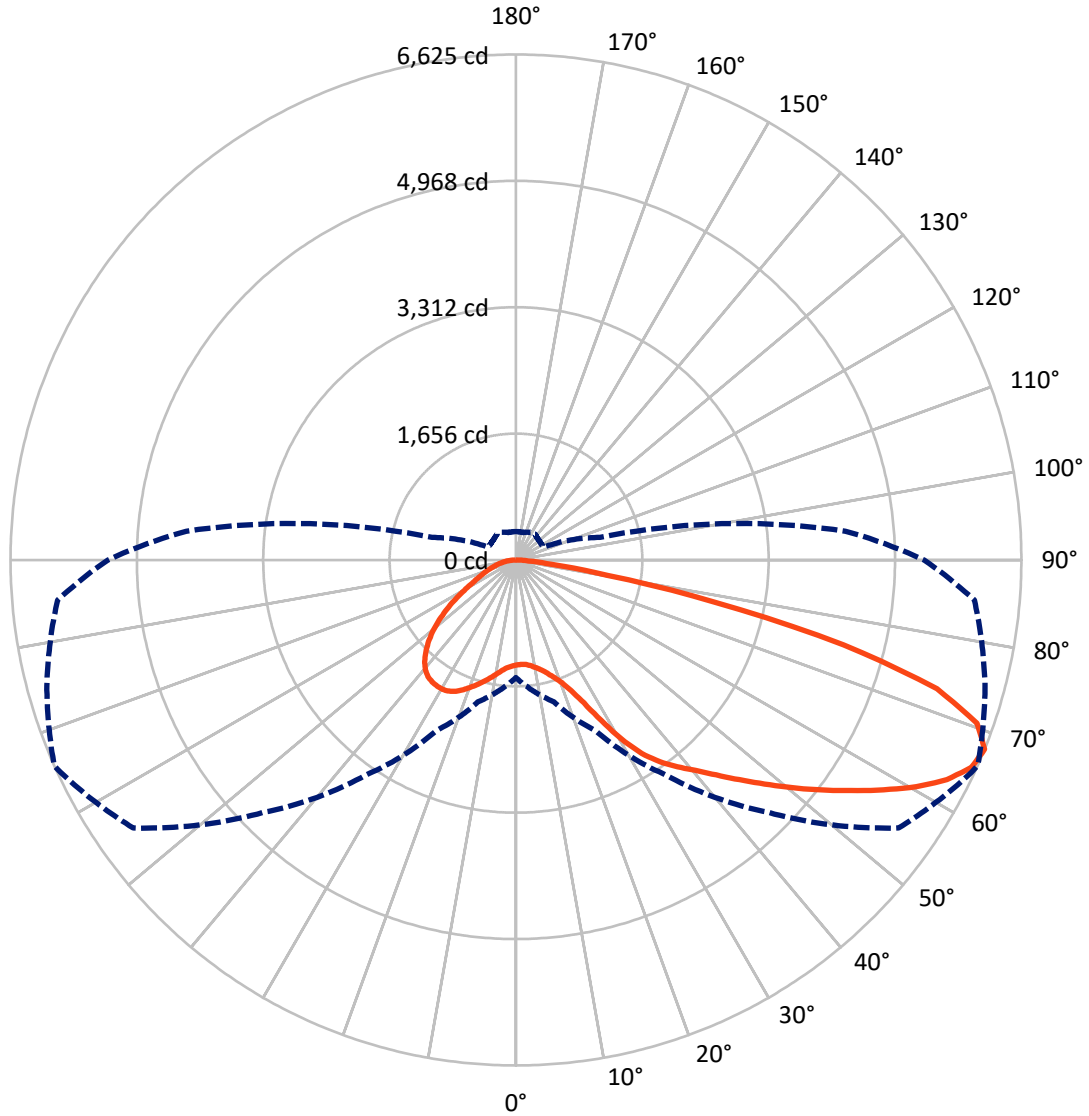
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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
<b>House Side</b>	Lumens	3085.7	0.0	3085.7
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	9324.3	0.0	9324.3
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	12410.0	0.0	12410.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	1.1
10°-20°	450.9	3.6
20°-30°	869.0	7.0
30°-40°	1523.7	12.3
40°-50°	2265.3	18.3
50°-60°	2871.5	23.1
60°-70°	2809.7	22.6
70°-80°	1340.2	10.8
80°-90°	143.2	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°	12410.0	100.0
0°-180°	12410.0	100.0

**Coefficient of Utilization**

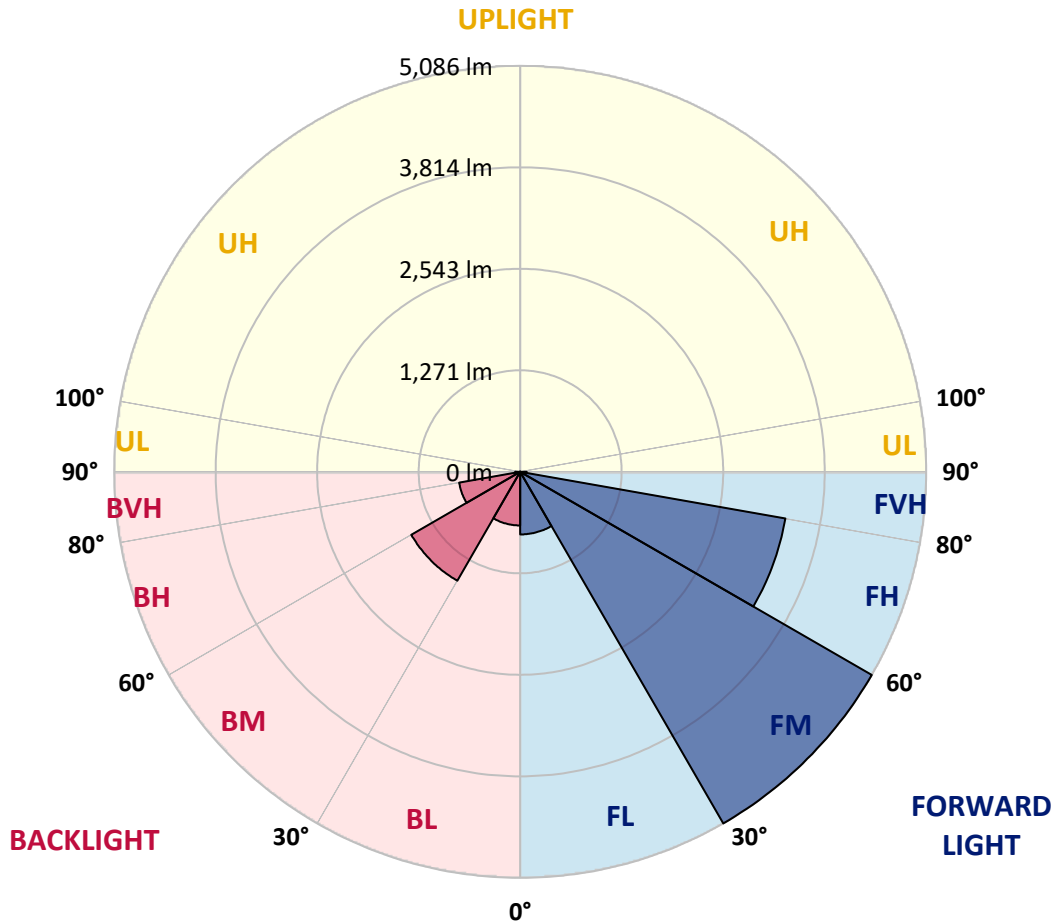


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	784.2	6.3			
FM (30°-60°)	5085.5	41.0			
FH (60°-80°)	3373.4	27.2			G2/5000
FVH (80°-90°)	81.2	0.7			G1/100
BL (0°-30°)	672.2	5.4	B2/1000		
BM (30°-60°)	1575.0	12.7	B2/2500		
BH (60°-80°)	776.5	6.3	B2/1000		G2/1000
BVH (80°-90°)	62.0	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°	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4
2.5°	1362.1	1369.9	1368.0	1364.7	1364.0	1365.3	1367.3	1369.3	1368.6	1371.9	1377.1
5°	1358.2	1366.0	1365.3	1365.3	1368.0	1373.2	1376.4	1379.7	1376.4	1380.3	1387.5
7.5°	1360.8	1366.7	1369.3	1371.9	1378.4	1388.2	1396.0	1403.2	1399.3	1403.8	1412.9
10°	1394.0	1398.6	1401.2	1401.2	1405.8	1416.9	1424.7	1437.7	1434.5	1441.6	1453.4
12.5°	1454.7	1459.2	1459.2	1456.6	1459.9	1467.1	1469.7	1484.0	1478.1	1489.9	1501.6
15°	1529.0	1538.1	1531.0	1526.4	1527.7	1534.9	1534.2	1545.3	1539.4	1549.2	1559.7
17.5°	1611.2	1622.9	1611.2	1610.5	1607.9	1615.7	1616.4	1626.2	1615.7	1622.9	1630.1
20°	1708.3	1724.6	1714.8	1718.1	1712.2	1715.5	1718.7	1733.1	1716.8	1722.0	1720.1
22.5°	1845.2	1864.8	1854.4	1866.8	1862.8	1860.2	1859.6	1885.0	1859.6	1861.5	1842.6
25°	2044.8	2068.2	2050.0	2066.9	2066.9	2075.4	2085.2	2117.8	2075.4	2063.0	2014.1
27.5°	2339.5	2363.0	2327.1	2337.5	2334.3	2355.1	2344.7	2425.5	2379.9	2359.7	2261.2
30°	2694.2	2735.9	2668.1	2665.5	2662.2	2695.5	2710.5	2764.0	2717.7	2697.4	2578.8
32.5°	3077.6	3121.3	3040.4	3016.9	3004.5	3024.8	3012.4	3055.4	3023.5	2992.2	2845.5
35°	3483.1	3526.2	3449.2	3403.6	3354.0	3311.7	3267.3	3278.4	3248.4	3200.8	3048.9
37.5°	3866.5	3945.4	3863.9	3815.0	3723.7	3640.9	3517.0	3465.5	3437.5	3393.8	3240.6
40°	4257.1	4302.1	4240.1	4198.4	4099.3	3969.6	3771.3	3662.4	3624.6	3582.2	3452.5
42.5°	4544.6	4587.7	4554.4	4525.7	4448.1	4297.5	4041.3	3905.0	3850.2	3802.6	3692.4
45°	4772.9	4804.8	4783.9	4794.4	4761.1	4615.1	4321.0	4165.2	4108.4	4050.4	3963.7
47.5°	4864.8	4898.7	4931.9	4993.9	5050.6	4943.0	4621.6	4446.8	4386.9	4327.5	4242.1
50°	4854.4	4888.9	4985.4	5117.1	5293.2	5257.3	4938.5	4746.8	4691.3	4623.5	4544.6
52.5°	4770.9	4810.0	4933.9	5153.0	5433.4	5492.7	5261.2	5056.5	5004.3	4923.5	4844.6
55°	4551.8	4575.3	4761.1	5071.5	5466.6	5657.0	5577.5	5386.4	5334.2	5221.4	5135.4
57.5°	4145.6	4179.5	4450.1	4851.7	5383.2	5768.5	5855.2	5733.3	5683.1	5520.7	5430.7
60°	3615.5	3669.6	3979.3	4482.7	5170.6	5767.8	6107.6	6074.3	6032.6	5815.4	5721.6
62.5°	3015.6	3078.2	3376.2	3961.1	4798.9	5604.2	6265.3	6359.9	6338.4	6087.3	5967.4
65°	2316.0	2359.0	2655.7	3286.2	4220.6	5252.7	6283.6	6554.8	6558.8	6294.0	6095.8
67.5°	1542.0	1665.9	1923.5	2466.0	3446.0	4678.3	6123.2	6586.8	6624.6	6365.1	6031.3
70°	752.4	915.4	1167.8	1602.7	2466.0	3797.4	5703.9	6324.7	6408.8	6157.8	5646.6
72.5°	312.3	365.1	502.7	790.9	1415.6	2562.5	4861.5	5614.0	5769.8	5456.2	4747.4
75°	210.6	228.2	287.5	405.6	644.9	1263.6	3506.0	4186.0	4437.1	4120.8	3368.4
77.5°	162.4	173.4	209.3	283.6	383.4	477.9	1876.5	2522.7	2652.5	2455.5	1752.7
80°	127.8	136.3	156.5	206.7	271.9	255.6	639.6	1143.0	1218.0	1021.7	563.4
82.5°	110.8	114.1	112.1	140.2	180.6	149.3	210.0	421.9	465.5	337.8	183.9
85°	80.2	89.3	93.2	86.7	95.8	75.6	86.1	149.3	164.3	146.7	103.7
87.5°	32.6	48.3	59.3	56.1	35.2	21.5	26.7	43.7	50.2	54.8	33.9
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4	1376.4
2.5°	1377.7	1382.3	1385.6	1389.5	1392.1	1396.0	1403.8	1408.4	1409.0	1412.3	1411.6
5°	1390.1	1396.6	1403.8	1414.3	1426.0	1435.8	1450.8	1461.2	1465.1	1468.4	1467.7
7.5°	1416.9	1426.0	1439.0	1457.3	1474.2	1487.3	1505.5	1517.9	1530.3	1534.9	1535.5
10°	1456.6	1469.7	1488.6	1513.4	1531.6	1548.6	1567.5	1577.9	1590.3	1595.5	1598.1
12.5°	1506.2	1519.9	1544.7	1579.2	1596.2	1607.9	1614.4	1611.8	1614.4	1619.0	1620.3
15°	1562.9	1577.9	1605.9	1643.1	1654.8	1644.4	1630.1	1617.0	1615.1	1616.4	1620.9
17.5°	1630.1	1641.2	1673.8	1705.1	1696.6	1653.5	1622.2	1601.4	1591.0	1587.7	1592.3
20°	1724.0	1724.0	1750.7	1770.3	1713.5	1640.5	1591.6	1557.7	1536.2	1527.1	1525.1
22.5°	1838.1	1827.6	1844.6	1830.9	1710.3	1604.0	1536.2	1477.5	1444.9	1431.9	1429.9
25°	1982.8	1970.4	1965.9	1881.1	1686.8	1546.0	1435.8	1364.7	1336.0	1328.8	1330.1
27.5°	2201.2	2170.0	2110.6	1908.5	1643.8	1454.7	1318.4	1252.5	1236.2	1236.9	1238.9
30°	2492.1	2429.5	2284.1	1913.1	1573.3	1325.6	1198.4	1151.5	1143.7	1146.9	1158.0
32.5°	2761.3	2702.0	2461.4	1892.2	1465.1	1199.1	1090.8	1059.5	1047.8	1051.7	1056.9
35°	2972.6	2956.3	2625.7	1862.8	1332.1	1080.4	994.3	967.6	944.8	939.6	943.5
37.5°	3172.1	3165.6	2749.0	1821.8	1200.4	996.3	916.8	881.5	848.3	830.0	830.7
40°	3391.2	3384.7	2829.8	1758.5	1083.7	923.3	847.0	800.7	759.6	726.4	729.6
42.5°	3637.7	3599.2	2868.3	1667.9	984.6	861.3	790.3	727.7	673.5	642.9	644.9
45°	3907.0	3820.2	2867.6	1552.5	901.1	804.6	729.6	640.9	590.7	562.0	560.7
47.5°	4192.5	4031.5	2832.4	1424.7	820.3	742.0	635.7	567.9	534.7	517.1	513.1
50°	4487.3	4229.1	2772.4	1278.0	737.4	670.9	577.0	530.8	505.3	489.0	483.2
52.5°	4764.4	4408.4	2700.1	1111.7	653.3	601.8	551.0	515.1	488.4	470.1	462.3
55°	5021.9	4562.9	2597.7	941.5	584.9	555.5	538.6	508.6	477.9	456.4	447.9
57.5°	5250.8	4663.3	2421.0	781.8	536.0	523.6	525.5	497.5	462.3	444.0	432.3
60°	5441.2	4737.0	2159.5	633.8	496.2	492.3	505.3	476.6	435.6	414.7	405.6
62.5°	5555.3	4735.7	1838.7	519.0	462.3	463.6	478.6	450.6	408.8	389.3	383.4
65°	5545.5	4619.6	1486.6	444.0	429.7	431.0	450.6	421.9	386.7	374.9	374.3
67.5°	5349.2	4336.6	1140.4	395.1	393.8	399.7	422.5	402.3	373.0	371.7	373.6
70°	4817.8	3749.2	821.6	356.0	356.7	365.1	395.1	389.9	365.8	368.4	367.7
72.5°	3863.3	2858.5	551.6	314.9	315.6	329.3	369.0	380.1	358.6	393.2	398.4
75°	2572.9	1782.6	354.7	271.2	271.9	289.5	346.2	361.2	339.1	391.9	395.1
77.5°	1236.2	801.3	256.9	228.2	228.2	244.5	299.3	323.4	288.8	304.5	279.1
80°	427.1	301.2	202.1	183.9	180.0	191.0	252.3	280.4	249.1	229.5	215.2
82.5°	168.2	156.5	162.4	142.8	129.8	136.9	196.3	231.5	183.2	165.6	165.0
85°	96.5	101.7	114.8	94.5	75.0	84.1	144.1	166.3	138.2	121.9	124.5
87.5°	26.1	35.9	52.8	48.9	33.9	35.9	68.5	91.9	79.5	61.3	63.2
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)