

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: P882969

Luminaire Tested: **NAV-SB3A-830-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882969  
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-SB3A-830-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

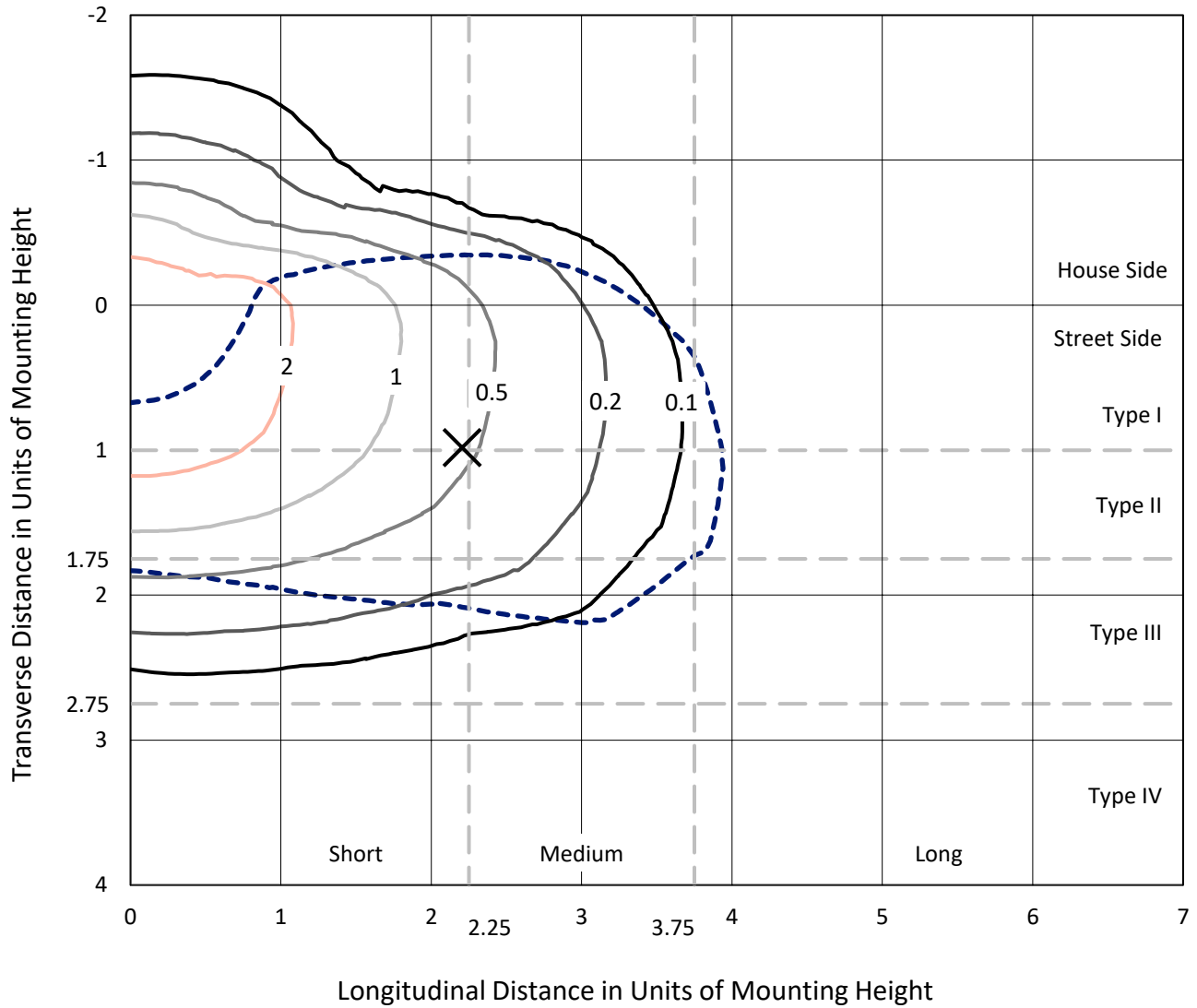
Lumens per Lamp: N/A  
Luminaire Lumens: 11781 lumens  
Efficiency: N/A  
Efficacy: 139.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 0.717  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

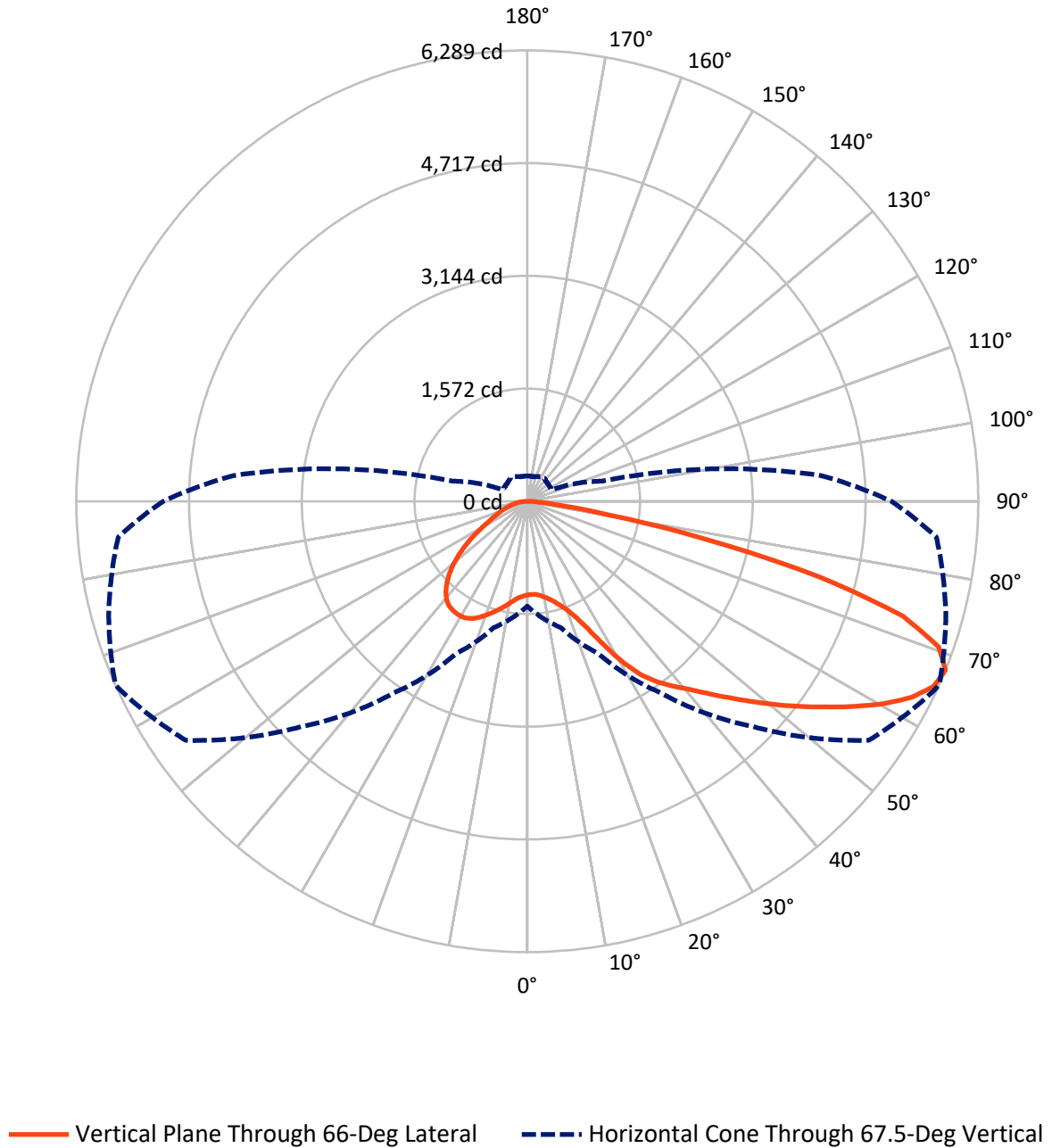
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2929.3	0.0	2929.3
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	8851.7	0.0	8851.7
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	11781.0	0.0	11781.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.5	1.1
10°-20°	428.0	3.6
20°-30°	825.0	7.0
30°-40°	1446.5	12.3
40°-50°	2150.5	18.3
50°-60°	2725.9	23.1
60°-70°	2667.3	22.6
70°-80°	1272.3	10.8
80°-90°	136.0	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°	11781.0	100.0
0°-180°	11781.0	100.0

**Coefficient of Utilization**

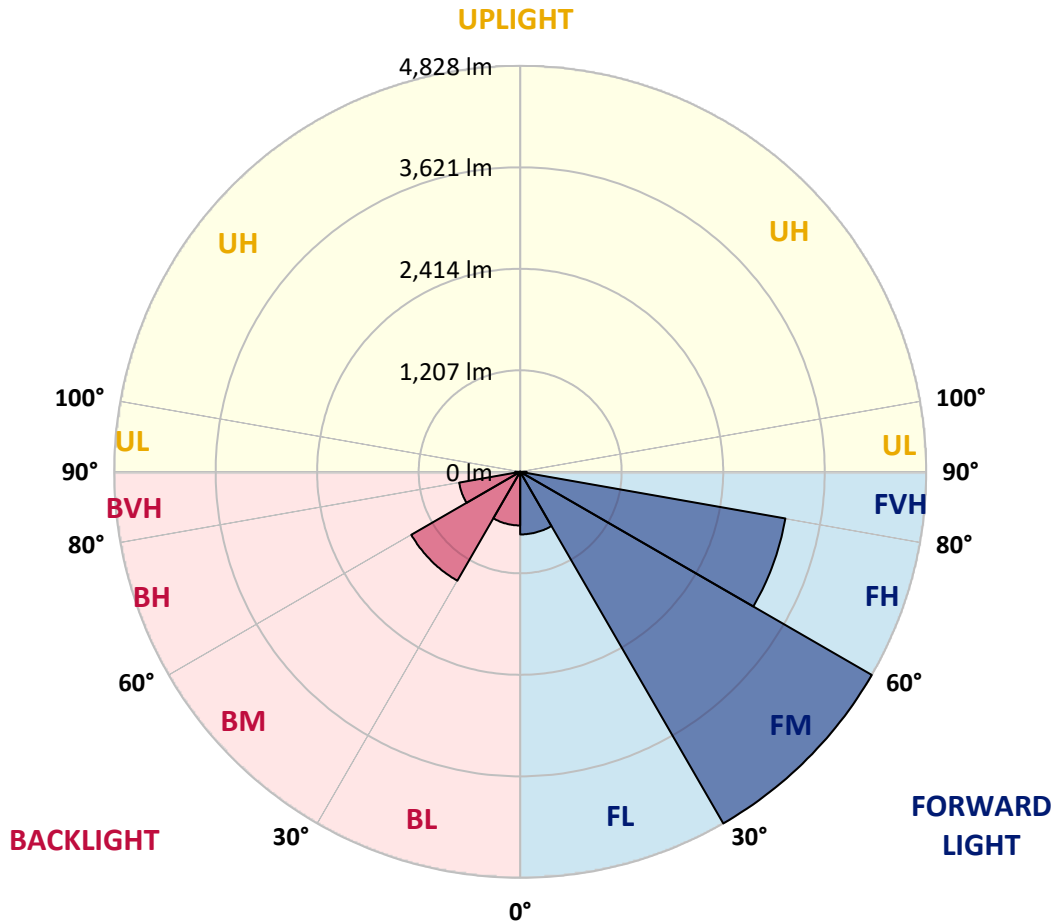


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	744.4	6.3			
FM (30°-60°)	4827.8	41.0			
FH (60°-80°)	3202.4	27.2			G2/5000
FVH (80°-90°)	77.1	0.7			G1/100
BL (0°-30°)	638.1	5.4	B2/1000		
BM (30°-60°)	1495.2	12.7	B2/2500		
BH (60°-80°)	737.2	6.3	B2/1000		G2/1000
BVH (80°-90°)	58.9	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°	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7
2.5°	1293.1	1300.5	1298.6	1295.5	1294.9	1296.1	1298.0	1299.9	1299.2	1302.3	1307.3
5°	1289.3	1296.8	1296.1	1296.1	1298.6	1303.6	1306.7	1309.8	1306.7	1310.4	1317.2
7.5°	1291.8	1297.4	1299.9	1302.3	1308.5	1317.8	1325.2	1332.0	1328.3	1332.7	1341.3
10°	1323.4	1327.7	1330.2	1330.2	1334.5	1345.0	1352.5	1364.9	1361.8	1368.6	1379.7
12.5°	1380.9	1385.3	1385.3	1382.8	1385.9	1392.7	1395.2	1408.8	1403.2	1414.4	1425.5
15°	1451.5	1460.2	1453.4	1449.0	1450.3	1457.1	1456.5	1467.0	1461.4	1470.7	1480.6
17.5°	1529.5	1540.6	1529.5	1528.9	1526.4	1533.8	1534.5	1543.7	1533.8	1540.6	1547.5
20°	1621.7	1637.2	1627.9	1631.0	1625.4	1628.5	1631.6	1645.3	1629.8	1634.7	1632.9
22.5°	1751.7	1770.3	1760.4	1772.1	1768.4	1766.0	1765.3	1789.5	1765.3	1767.2	1749.2
25°	1941.1	1963.4	1946.1	1962.2	1962.2	1970.2	1979.5	2010.4	1970.2	1958.5	1912.0
27.5°	2220.9	2243.2	2209.1	2219.0	2216.0	2235.8	2225.9	2302.6	2259.3	2240.1	2146.6
30°	2557.6	2597.2	2532.9	2530.4	2527.3	2558.9	2573.1	2623.9	2579.9	2560.7	2448.1
32.5°	2921.6	2963.1	2886.3	2864.0	2852.3	2871.5	2859.7	2900.5	2870.2	2840.5	2701.2
35°	3306.6	3347.4	3274.4	3231.1	3184.0	3143.8	3101.7	3112.2	3083.8	3038.6	2894.4
37.5°	3670.6	3745.5	3668.1	3621.7	3535.0	3456.4	3338.8	3289.9	3263.3	3221.8	3076.3
40°	4041.3	4084.0	4025.2	3985.6	3891.5	3768.4	3580.2	3476.8	3440.9	3400.7	3277.5
42.5°	4314.3	4355.1	4323.6	4296.3	4222.7	4079.7	3836.4	3707.1	3655.1	3609.9	3505.3
45°	4530.9	4561.3	4541.5	4551.4	4519.8	4381.1	4102.0	3954.0	3900.2	3845.1	3762.8
47.5°	4618.2	4650.4	4682.0	4740.8	4794.6	4692.5	4387.3	4221.4	4164.5	4108.2	4027.1
50°	4608.3	4641.1	4732.7	4857.8	5024.9	4990.8	4688.2	4506.2	4453.6	4389.2	4314.3
52.5°	4529.1	4566.2	4683.8	4891.8	5158.0	5214.3	4994.6	4800.2	4750.7	4673.9	4599.0
55°	4321.1	4343.4	4519.8	4814.4	5189.5	5370.3	5294.8	5113.4	5063.9	4956.8	4875.1
57.5°	3935.5	3967.7	4224.5	4605.8	5110.3	5476.1	5558.4	5442.7	5395.0	5240.9	5155.5
60°	3432.2	3483.6	3777.6	4255.5	4908.5	5475.5	5798.0	5766.4	5726.8	5520.7	5431.6
62.5°	2862.8	2922.2	3205.1	3760.3	4555.7	5320.1	5947.8	6037.5	6017.1	5778.8	5664.9
65°	2198.6	2239.5	2521.1	3119.7	4006.7	4986.5	5965.1	6222.6	6226.3	5975.0	5786.9
67.5°	1463.9	1581.5	1826.0	2341.0	3271.3	4441.2	5812.8	6252.9	6288.8	6042.5	5725.6
70°	714.3	869.0	1108.6	1521.5	2341.0	3604.9	5414.8	6004.1	6084.0	5845.7	5360.4
72.5°	296.5	346.6	477.2	750.8	1343.8	2432.6	4615.1	5329.4	5477.4	5179.6	4506.8
75°	199.9	216.6	273.0	385.0	612.2	1199.6	3328.3	3973.9	4212.2	3912.0	3197.7
77.5°	154.1	164.6	198.7	269.3	364.0	453.7	1781.4	2394.8	2518.0	2331.1	1663.8
80°	121.3	129.4	148.6	196.2	258.1	242.6	607.2	1085.1	1156.3	969.9	534.8
82.5°	105.2	108.3	106.5	133.1	171.5	141.7	199.3	400.5	442.0	320.6	174.6
85°	76.1	84.8	88.5	82.3	91.0	71.8	81.7	141.7	156.0	139.3	98.4
87.5°	30.9	45.8	56.3	53.2	33.4	20.4	25.4	41.5	47.7	52.0	32.2
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°	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7	1306.7
2.5°	1307.9	1312.2	1315.3	1319.0	1321.5	1325.2	1332.7	1337.0	1337.6	1340.7	1340.1
5°	1319.7	1325.9	1332.7	1342.6	1353.7	1363.0	1377.2	1387.1	1390.8	1393.9	1393.3
7.5°	1345.0	1353.7	1366.1	1383.4	1399.5	1411.9	1429.2	1441.0	1452.7	1457.1	1457.7
10°	1382.8	1395.2	1413.1	1436.7	1454.0	1470.1	1488.0	1497.9	1509.7	1514.6	1517.1
12.5°	1429.8	1442.8	1466.4	1499.2	1515.3	1526.4	1532.6	1530.1	1532.6	1536.9	1538.2
15°	1483.7	1497.9	1524.5	1559.8	1571.0	1561.1	1547.5	1535.1	1533.2	1534.5	1538.8
17.5°	1547.5	1558.0	1588.9	1618.6	1610.6	1569.7	1540.0	1520.2	1510.3	1507.2	1511.6
20°	1636.6	1636.6	1662.0	1680.5	1626.7	1557.4	1510.9	1478.7	1458.3	1449.7	1447.8
22.5°	1744.9	1735.0	1751.1	1738.1	1623.6	1522.7	1458.3	1402.6	1371.7	1359.3	1357.4
25°	1882.3	1870.6	1866.2	1785.8	1601.3	1467.6	1363.0	1295.5	1268.3	1261.5	1262.7
27.5°	2089.7	2060.0	2003.6	1811.8	1560.5	1380.9	1251.6	1189.1	1173.6	1174.2	1176.1
30°	2365.7	2306.3	2168.3	1816.1	1493.6	1258.4	1137.7	1093.1	1085.7	1088.8	1099.3
32.5°	2621.4	2565.1	2336.7	1796.3	1390.8	1138.3	1035.6	1005.8	994.7	998.4	1003.4
35°	2821.9	2806.5	2492.6	1768.4	1264.6	1025.7	943.9	918.6	896.9	892.0	895.7
37.5°	3011.3	3005.2	2609.6	1729.4	1139.5	945.8	870.3	836.9	805.3	788.0	788.6
40°	3219.3	3213.1	2686.4	1669.4	1028.7	876.5	804.1	760.1	721.1	689.5	692.6
42.5°	3453.3	3416.8	2722.9	1583.4	934.7	817.7	750.2	690.8	639.4	610.3	612.2
45°	3708.9	3626.6	2722.3	1473.8	855.4	763.8	692.6	608.5	560.8	533.6	532.3
47.5°	3980.0	3827.2	2688.9	1352.5	778.7	704.4	603.5	539.1	507.6	490.9	487.1
50°	4259.8	4014.7	2631.9	1213.2	700.1	636.9	547.8	503.9	479.7	464.2	458.7
52.5°	4522.9	4184.9	2563.2	1055.4	620.2	571.3	523.0	489.0	463.6	446.3	438.9
55°	4767.4	4331.6	2466.0	893.8	555.2	527.4	511.3	482.8	453.7	433.3	425.2
57.5°	4984.7	4427.0	2298.3	742.2	508.8	497.0	498.9	472.3	438.9	421.5	410.4
60°	5165.4	4496.9	2050.1	601.6	471.0	467.3	479.7	452.5	413.5	393.7	385.0
62.5°	5273.7	4495.7	1745.5	492.7	438.9	440.1	454.3	427.7	388.1	369.5	364.0
65°	5264.4	4385.5	1411.3	421.5	407.9	409.1	427.7	400.5	367.1	355.9	355.3
67.5°	5078.1	4116.8	1082.6	375.1	373.9	379.4	401.1	381.9	354.1	352.8	354.7
70°	4573.6	3559.1	779.9	338.0	338.6	346.6	375.1	370.2	347.2	349.7	349.1
72.5°	3667.5	2713.6	523.7	299.0	299.6	312.6	350.3	360.9	340.4	373.2	378.2
75°	2442.5	1692.3	336.7	257.5	258.1	274.8	328.7	342.9	321.9	372.0	375.1
77.5°	1173.6	760.7	243.9	216.6	216.6	232.1	284.1	307.0	274.2	289.1	264.9
80°	405.4	286.0	191.9	174.6	170.8	181.4	239.5	266.2	236.5	217.9	204.3
82.5°	159.7	148.6	154.1	135.6	123.2	130.0	186.3	219.7	173.9	157.2	156.6
85°	91.6	96.6	108.9	89.8	71.2	79.8	136.8	157.8	131.2	115.7	118.2
87.5°	24.8	34.0	50.1	46.4	32.2	34.0	65.0	87.3	75.5	58.2	60.0
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)