

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: P960886

Luminaire Tested: **NAV-SB1D-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960886
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10711.3 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

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



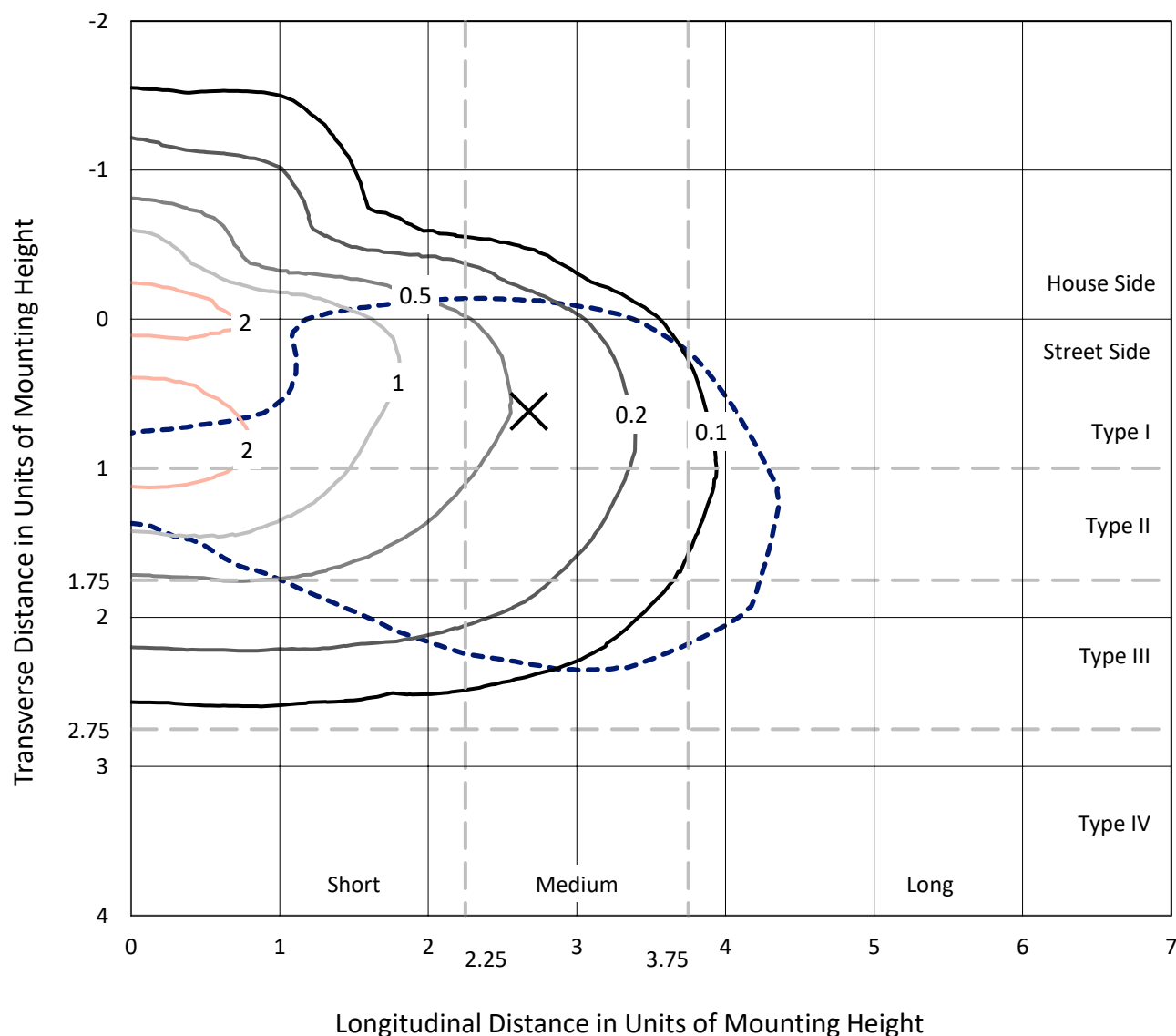
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

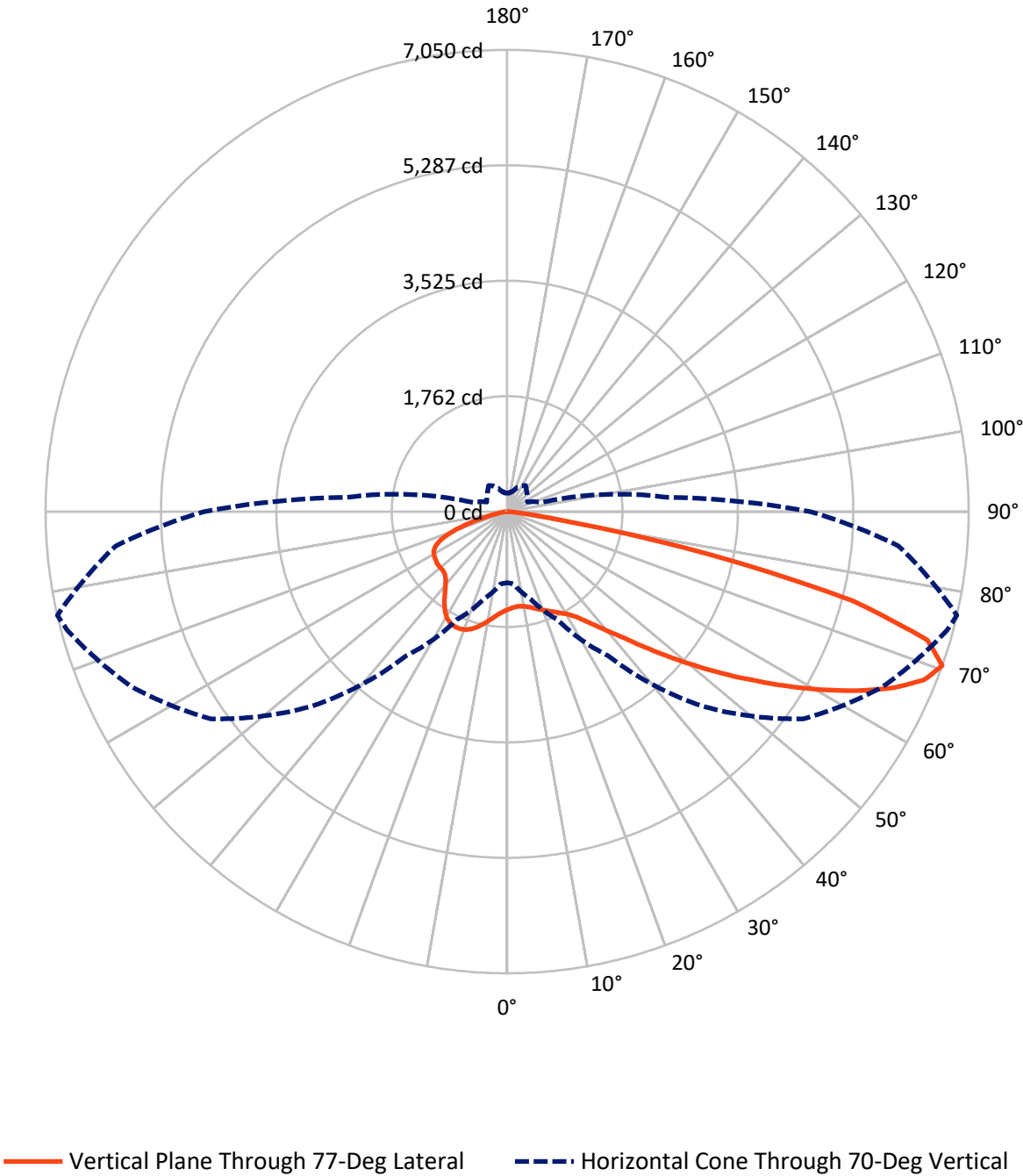


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc

Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2345.6	0.0	2345.6
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	8365.7	0.0	8365.7
	% Fixture	78.1	0.0	78.1
Total	Lumens	10711.3	0.0	10711.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	1.3
10°-20°	411.3	3.8
20°-30°	703.4	6.6
30°-40°	1131.2	10.6
40°-50°	1766.0	16.5
50°-60°	2359.0	22.0
60°-70°	2514.3	23.5
70°-80°	1547.8	14.5
80°-90°	135.6	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°	10711.3	100.0
0°-180°	10711.3	100.0

Coefficient of Utilization



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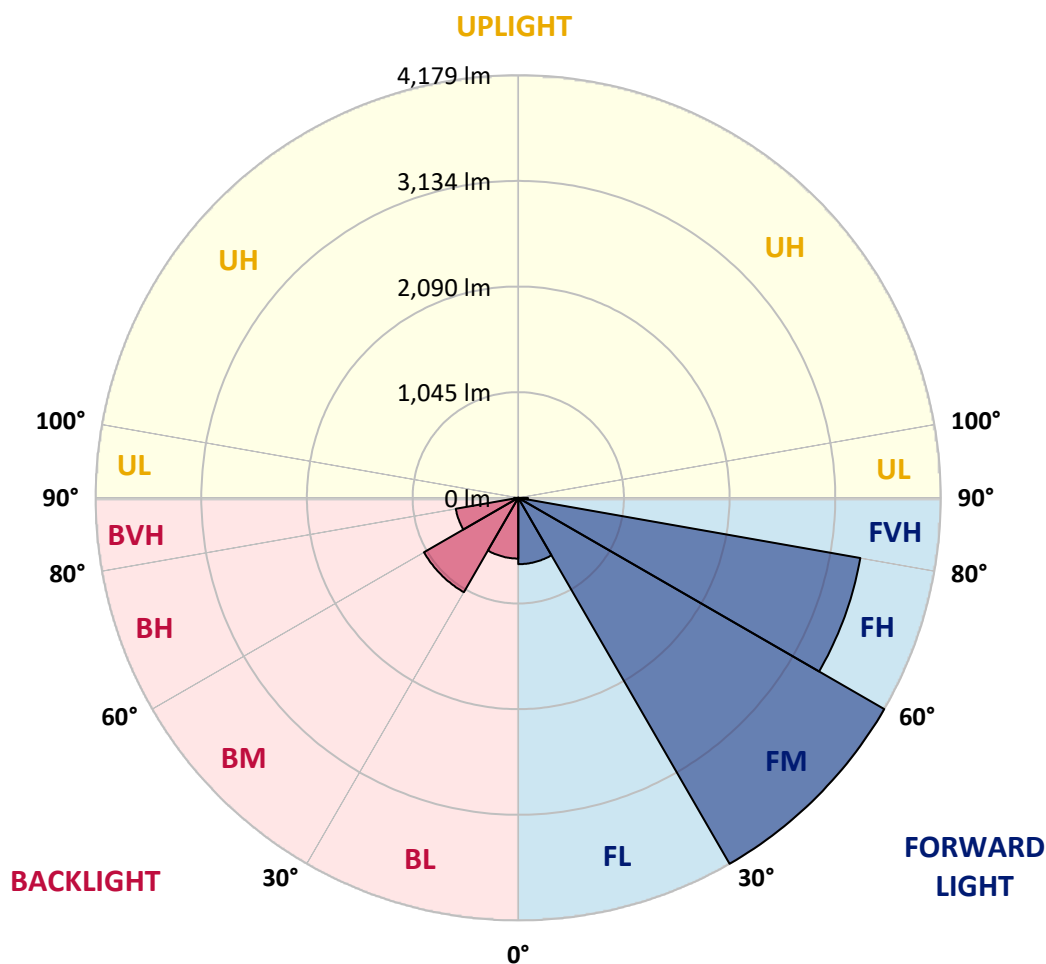
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	656.2	6.1			
FM	(30°-60°)	4179.3	39.0			
FH	(60°-80°)	3435.3	32.1			G2/5000
FVH	(80°-90°)	94.8	0.9			G1/100
BL	(0°-30°)	601.0	5.6	B2/1000		
BM	(30°-60°)	1076.9	10.1	B2/2500		
BH	(60°-80°)	626.9	5.9	B2/1000		G2/1000
BVH	(80°-90°)	40.8	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3
2.5°	1377.5	1376.9	1384.1	1386.2	1399.4	1408.8	1426.3	1444.9	1469.1	1471.8	1486.7
5°	1298.0	1298.0	1306.2	1315.0	1332.0	1350.5	1377.5	1409.9	1451.5	1458.1	1494.9
7.5°	1230.4	1234.8	1242.0	1259.0	1278.7	1305.6	1346.7	1392.9	1447.7	1458.1	1517.3
10°	1176.2	1181.1	1189.8	1203.6	1233.2	1270.5	1324.3	1383.5	1457.0	1473.4	1550.3
12.5°	1159.2	1164.1	1169.0	1179.5	1206.8	1250.7	1315.0	1387.8	1479.5	1496.0	1595.2
15°	1198.6	1204.7	1200.8	1198.1	1212.4	1252.3	1319.3	1403.8	1507.5	1531.0	1650.7
17.5°	1289.7	1291.9	1283.1	1257.4	1255.1	1276.5	1340.2	1425.8	1542.6	1568.4	1706.6
20°	1436.7	1432.8	1414.8	1363.8	1334.7	1330.2	1375.9	1458.7	1578.8	1606.3	1767.0
22.5°	1636.4	1632.0	1595.8	1515.2	1450.5	1407.6	1427.4	1501.4	1619.4	1650.1	1825.6
25°	1885.5	1879.4	1826.2	1716.5	1616.1	1510.2	1497.6	1558.0	1669.3	1697.8	1887.1
27.5°	2176.2	2171.3	2113.7	1968.8	1824.0	1650.7	1584.9	1624.3	1721.4	1753.8	1956.2
30°	2488.9	2503.2	2401.1	2245.4	2062.1	1833.9	1702.2	1706.1	1788.9	1817.9	2040.2
32.5°	2856.5	2881.1	2758.3	2560.8	2310.6	2033.0	1850.3	1820.2	1887.1	1911.2	2146.0
35°	3220.7	3248.6	3146.6	2928.3	2640.3	2267.8	2005.0	1951.3	2017.6	2044.0	2286.5
37.5°	3535.5	3572.8	3520.2	3330.4	2993.0	2550.9	2206.9	2105.5	2178.4	2211.3	2475.2
40°	3784.1	3841.1	3837.3	3718.8	3408.8	2894.3	2463.1	2295.8	2378.1	2413.8	2704.0
42.5°	3985.9	4035.3	4078.1	4072.1	3842.7	3284.3	2764.2	2543.2	2605.8	2646.9	2961.2
45°	4125.3	4177.9	4270.2	4369.4	4260.2	3701.8	3109.3	2836.7	2893.8	2955.7	3267.9
47.5°	4249.9	4309.6	4429.2	4586.7	4614.7	4120.9	3487.3	3178.4	3230.6	3294.8	3575.6
50°	4260.8	4312.4	4497.8	4721.0	4866.4	4523.5	3893.3	3561.9	3610.8	3679.3	3905.4
52.5°	3995.9	4077.0	4400.6	4717.2	4982.1	4860.3	4296.4	3960.7	4015.5	4097.8	4246.5
55°	3101.6	3220.7	4116.0	4570.2	4941.0	5078.2	4679.8	4384.7	4455.0	4541.1	4590.0
57.5°	2671.6	2723.6	3267.3	4302.4	4753.4	5134.6	5003.5	4813.2	4926.2	5020.6	4953.1
60°	2401.1	2444.4	2766.0	3886.1	4506.5	5045.3	5253.7	5212.5	5407.8	5520.3	5324.5
62.5°	2111.5	2152.6	2445.0	3244.8	4190.6	4896.5	5411.7	5581.2	5901.5	6024.4	5674.5
65°	1824.0	1859.1	2139.5	2726.4	3789.0	4747.9	5493.4	5899.9	6358.5	6485.8	5965.2
67.5°	1503.7	1532.7	1797.6	2300.2	3300.8	4544.4	5534.0	6150.6	6756.3	6865.4	6108.9
70°	1085.1	1107.6	1381.3	1819.1	2688.1	4194.4	5517.6	6328.3	6962.5	7049.7	6000.3
72.5°	512.9	533.2	854.6	1181.1	1898.6	3513.1	5184.6	6187.4	6752.9	6709.6	5335.4
75°	273.8	291.3	491.0	647.9	1002.8	2408.2	4242.7	5330.0	5670.6	5460.0	3943.2
77.5°	185.4	199.2	303.9	389.0	458.1	1143.2	2727.0	3690.3	3550.4	3202.6	1974.9
80°	147.0	161.2	249.1	263.3	221.6	413.1	1126.8	1708.3	1227.1	981.4	561.7
82.5°	113.1	128.9	209.5	190.9	120.6	169.5	328.0	540.4	314.4	239.1	136.0
85°	69.1	86.1	164.6	121.8	68.1	77.4	111.3	150.3	96.0	80.1	48.8
87.5°	35.2	49.4	83.3	44.5	30.7	18.1	29.6	29.6	25.2	21.9	12.6
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°	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3	1494.3
2.5°	1499.8	1510.7	1529.4	1546.9	1560.7	1573.9	1587.0	1594.2	1596.3	1605.1	1610.1
5°	1517.3	1537.7	1573.9	1607.9	1629.2	1642.5	1651.8	1657.2	1658.3	1661.1	1665.5
7.5°	1549.7	1582.1	1632.5	1666.5	1682.4	1681.4	1677.5	1663.8	1658.3	1653.4	1654.5
10°	1595.2	1638.1	1700.1	1723.6	1713.7	1687.5	1653.4	1613.4	1594.7	1576.6	1571.1
12.5°	1651.8	1706.1	1767.0	1765.9	1717.1	1649.5	1570.6	1509.1	1470.2	1442.2	1435.6
15°	1720.4	1782.9	1829.5	1792.2	1685.2	1563.9	1448.2	1368.2	1333.0	1302.4	1299.0
17.5°	1791.1	1858.0	1879.4	1784.0	1605.1	1437.3	1306.2	1243.1	1208.5	1192.1	1197.0
20°	1860.2	1926.6	1909.1	1736.8	1483.4	1293.6	1176.7	1142.2	1135.0	1138.9	1137.2
22.5°	1933.2	1992.4	1915.1	1645.7	1328.1	1146.6	1082.3	1083.4	1099.3	1110.9	1113.6
25°	2007.8	2047.8	1899.1	1514.0	1161.3	1038.4	1022.5	1040.1	1071.3	1093.9	1099.9
27.5°	2079.6	2097.1	1864.6	1351.2	1018.1	961.1	963.8	1000.1	1047.2	1078.5	1086.2
30°	2160.8	2141.1	1798.3	1167.9	918.9	894.7	917.8	960.0	1007.2	1035.1	1041.7
32.5°	2252.4	2178.9	1692.9	998.5	848.6	841.5	879.3	906.8	927.6	935.8	940.2
35°	2366.5	2232.1	1558.0	879.3	785.6	802.6	838.8	825.0	816.8	812.4	816.8
37.5°	2514.6	2304.0	1399.9	802.1	734.5	774.6	789.4	746.6	714.2	698.3	702.1
40°	2693.0	2409.4	1248.0	742.2	702.1	750.4	724.7	673.1	631.9	609.5	611.1
42.5°	2891.0	2519.6	1120.2	697.2	684.1	730.7	676.9	615.5	549.1	542.0	549.1
45°	3098.9	2633.1	1033.0	662.7	675.3	713.7	649.5	550.2	503.1	532.1	547.5
47.5°	3306.9	2737.4	980.3	636.9	670.9	694.5	625.4	514.0	480.5	522.8	542.5
50°	3538.3	2830.6	956.7	618.3	665.9	686.9	589.2	504.7	456.9	484.9	505.7
52.5°	3768.2	2903.1	939.2	599.6	658.9	680.8	571.6	493.7	428.4	430.1	441.6
55°	3997.5	2950.3	919.9	574.9	642.9	667.6	570.0	481.6	407.0	399.3	404.9
57.5°	4242.2	2977.1	896.4	547.5	615.5	634.2	568.4	472.3	400.5	387.9	389.5
60°	4491.1	3016.6	865.6	514.0	578.7	594.1	564.5	469.0	396.6	375.3	376.9
62.5°	4714.5	3030.3	828.9	482.2	531.6	554.6	556.3	466.3	386.2	349.4	349.4
65°	4861.0	2971.1	764.8	446.0	480.5	514.0	540.4	456.9	367.6	330.8	330.8
67.5°	4854.9	2802.1	664.3	399.3	431.2	469.0	517.3	441.1	345.0	307.7	309.3
70°	4628.9	2468.6	537.1	345.0	376.9	420.8	487.7	417.5	318.2	282.5	285.8
72.5°	3970.0	1932.1	390.0	281.5	313.8	370.8	449.3	389.0	290.8	260.0	258.4
75°	2836.2	1222.7	264.4	216.2	244.2	314.4	401.6	355.5	265.5	261.2	246.3
77.5°	1448.7	584.2	175.0	158.0	170.0	247.9	337.3	317.6	269.4	215.6	192.0
80°	471.2	215.6	110.3	107.5	113.1	165.1	261.2	260.6	204.1	146.5	129.5
82.5°	150.3	92.7	71.9	69.1	66.4	103.7	182.1	206.2	137.7	92.7	92.1
85°	59.8	55.5	42.2	38.9	28.0	48.8	95.4	137.1	102.6	66.9	68.6
87.5°	21.9	21.9	11.5	8.2	6.0	16.5	25.8	41.1	58.7	34.5	34.0
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)