

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: P961940

Luminaire Tested: **NAV-SB2B-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961940
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-SB2B-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11850 lumens
Efficiency: N/A
Efficacy: 160.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 73.9
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



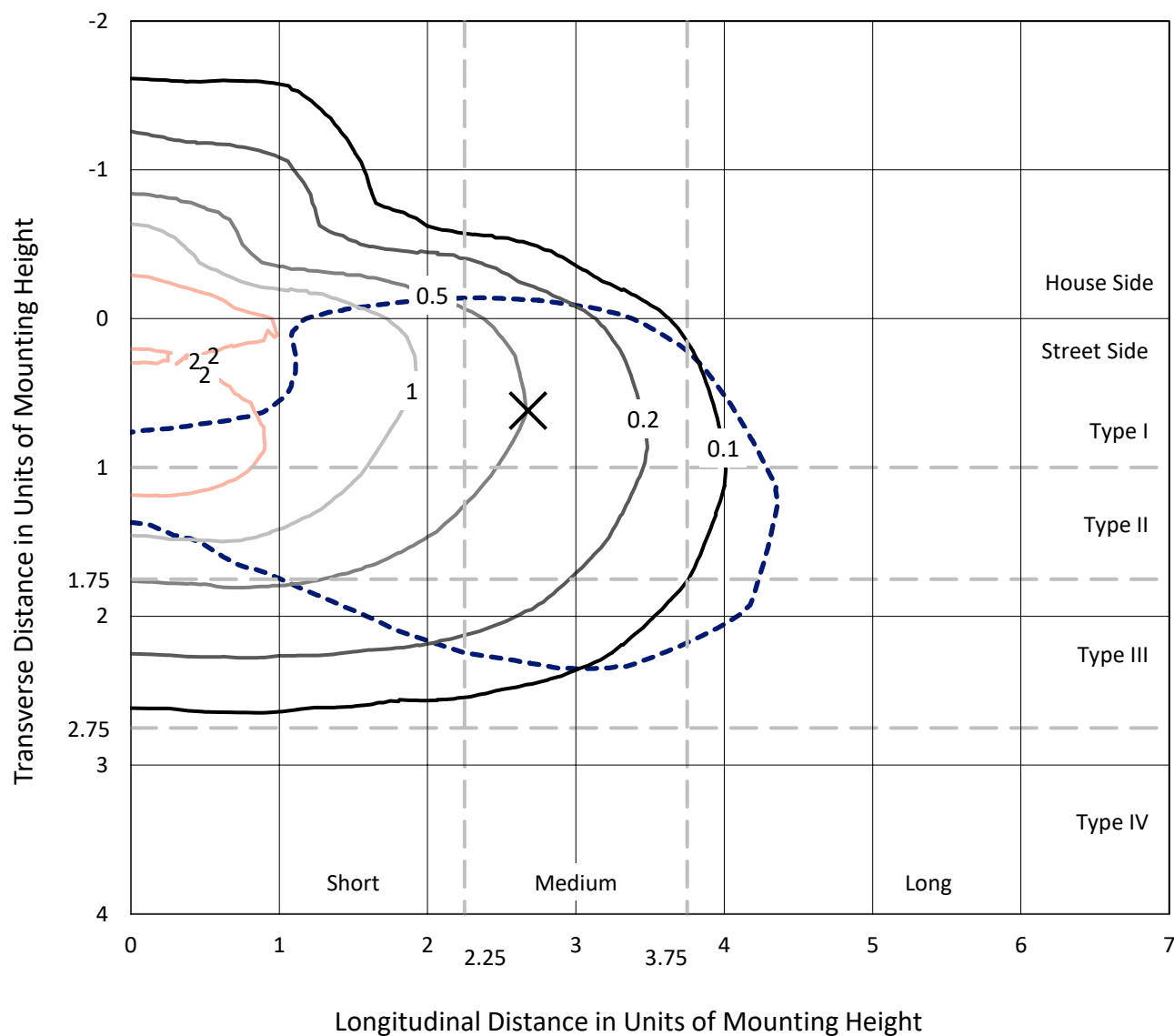
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

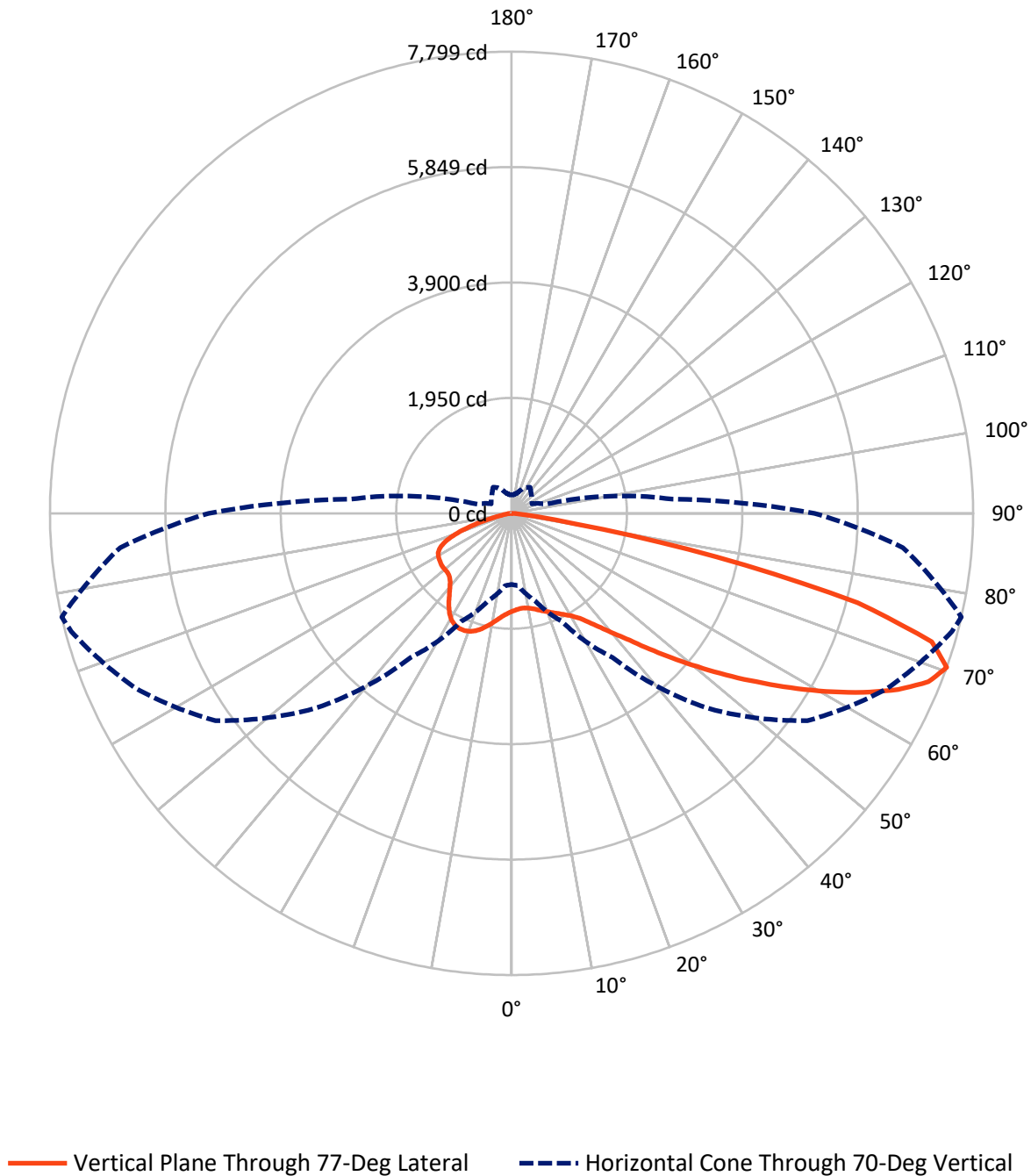
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	2595.0	0.0	2595.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	9255.1	0.0	9255.1
	% Fixture	78.1	0.0	78.1
Total	Lumens	11850.0	0.0	11850.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	1.3
10°-20°	455.1	3.8
20°-30°	778.2	6.6
30°-40°	1251.4	10.6
40°-50°	1953.8	16.5
50°-60°	2609.8	22.0
60°-70°	2781.7	23.5
70°-80°	1712.4	14.5
80°-90°	150.1	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°	11850.0	100.0
0°-180°	11850.0	100.0

Coefficient of Utilization



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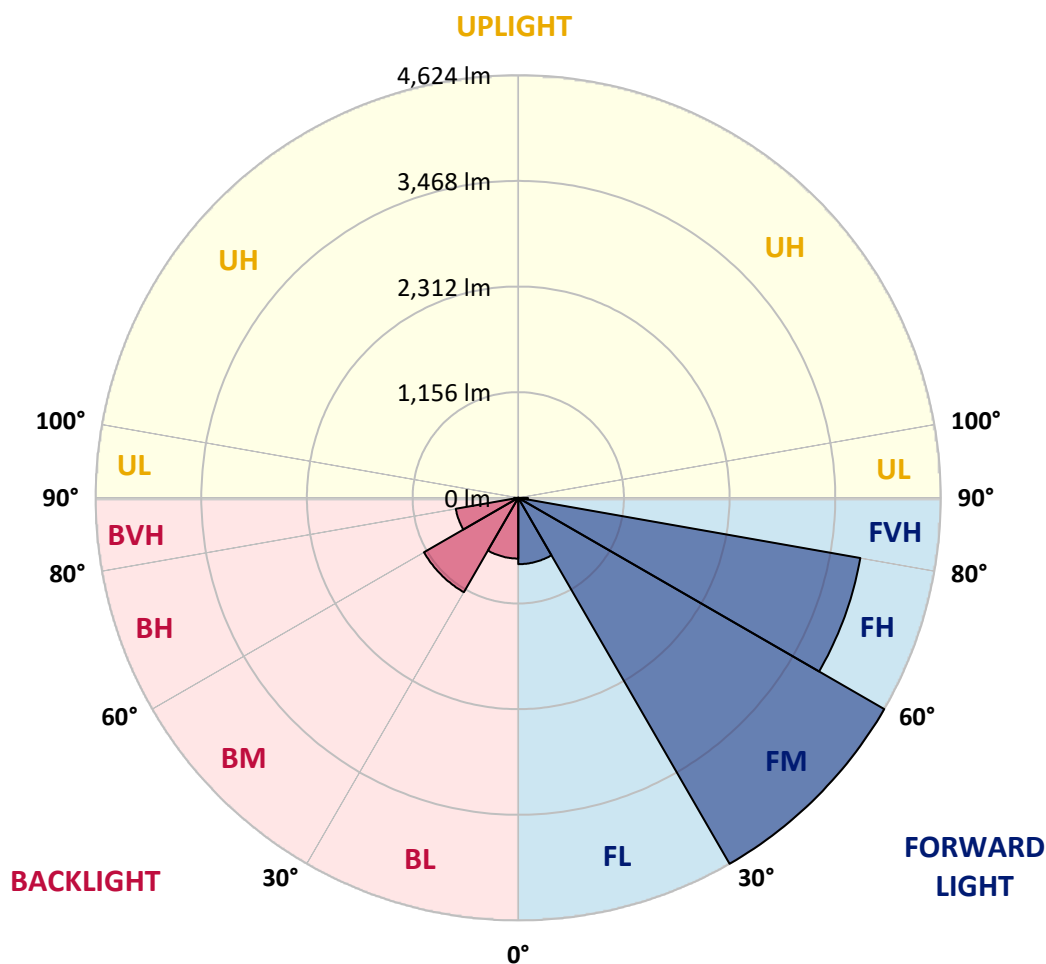
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	726.0	6.1			
FM	(30°-60°)	4623.6	39.0			
FH	(60°-80°)	3800.5	32.1			G2/5000
FVH	(80°-90°)	104.9	0.9			G2/225
BL	(0°-30°)	664.9	5.6	B2/1000		
BM	(30°-60°)	1191.4	10.1	B2/2500		
BH	(60°-80°)	693.5	5.9	B2/1000		G2/1000
BVH	(80°-90°)	45.1	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°	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2
2.5°	1523.9	1523.4	1531.2	1533.6	1548.2	1558.5	1577.9	1598.6	1625.2	1628.3	1644.7
5°	1435.9	1435.9	1445.0	1454.8	1473.5	1494.1	1523.9	1559.7	1605.9	1613.1	1653.8
7.5°	1361.3	1366.1	1374.0	1392.9	1414.7	1444.4	1489.9	1540.9	1601.6	1613.1	1678.6
10°	1301.2	1306.7	1316.4	1331.6	1364.3	1405.6	1465.0	1530.6	1611.9	1630.2	1715.1
12.5°	1282.4	1287.8	1293.3	1304.8	1335.2	1383.7	1454.8	1535.4	1636.8	1655.0	1764.8
15°	1326.0	1332.7	1328.5	1325.4	1341.2	1385.6	1459.6	1553.1	1667.8	1693.8	1826.1
17.5°	1426.8	1429.3	1419.5	1391.0	1388.6	1412.2	1482.7	1577.4	1706.6	1735.1	1888.0
20°	1589.5	1585.3	1565.2	1508.7	1476.6	1471.7	1522.1	1613.8	1746.6	1777.0	1954.8
22.5°	1810.4	1805.5	1765.5	1676.3	1604.6	1557.3	1579.1	1661.1	1791.6	1825.5	2019.8
25°	2085.9	2079.2	2020.4	1899.0	1787.9	1670.7	1656.8	1723.5	1846.7	1878.3	2087.7
27.5°	2407.5	2402.1	2338.3	2178.1	2017.9	1826.1	1753.4	1797.0	1904.4	1940.2	2164.2
30°	2753.5	2769.2	2656.4	2484.0	2281.3	2028.9	1883.2	1887.4	1979.1	2011.3	2257.0
32.5°	3160.1	3187.4	3051.5	2833.0	2556.2	2249.2	2047.0	2013.7	2087.7	2114.5	2374.2
35°	3563.1	3594.1	3481.2	3239.6	2921.0	2508.9	2218.2	2158.8	2232.1	2261.3	2529.5
37.5°	3911.4	3952.7	3894.5	3684.5	3311.3	2822.0	2441.5	2329.3	2410.0	2446.4	2738.3
40°	4186.4	4249.4	4245.2	4114.1	3771.3	3202.0	2725.0	2539.8	2630.9	2670.3	2991.4
42.5°	4409.8	4464.3	4511.6	4505.0	4251.3	3633.5	3058.2	2813.5	2882.7	2928.3	3276.0
45°	4563.8	4622.1	4724.1	4833.9	4713.2	4095.4	3439.9	3138.2	3201.4	3270.0	3615.3
47.5°	4701.7	4767.8	4900.1	5074.3	5105.2	4559.0	3858.0	3516.4	3574.0	3645.0	3955.8
50°	4713.8	4770.9	4976.0	5223.0	5383.8	5004.5	4307.2	3940.6	3994.6	4070.5	4320.5
52.5°	4420.6	4510.4	4868.5	5218.7	5511.8	5377.2	4753.2	4381.8	4442.5	4533.5	4698.0
55°	3431.4	3563.1	4553.6	5056.0	5466.3	5618.0	5177.5	4850.9	4928.6	5023.9	5078.0
57.5°	2955.6	3013.2	3614.7	4759.9	5258.8	5680.5	5535.5	5324.9	5449.9	5554.3	5479.6
60°	2656.4	2704.4	3059.9	4299.3	4985.7	5581.6	5812.3	5766.8	5982.8	6107.2	5890.6
62.5°	2336.0	2381.5	2705.0	3589.8	4636.1	5417.1	5987.0	6174.6	6529.0	6665.0	6277.7
65°	2017.9	2056.8	2366.9	3016.3	4191.8	5252.7	6077.4	6527.2	7034.6	7175.3	6599.4
67.5°	1663.5	1695.7	1988.8	2544.8	3651.7	5027.5	6122.3	6804.6	7474.5	7595.4	6758.4
70°	1200.5	1225.3	1528.2	2012.5	2973.8	4640.4	6104.2	7001.2	7702.8	7799.2	6638.2
72.5°	567.4	589.9	945.6	1306.7	2100.4	3886.6	5735.8	6845.2	7470.9	7422.9	5902.7
75°	302.9	322.3	543.1	716.8	1109.4	2664.3	4693.8	5896.6	6273.5	6040.4	4362.4
77.5°	205.1	220.3	336.2	430.3	506.8	1264.7	3016.9	4082.6	3927.8	3543.0	2184.8
80°	162.7	178.5	275.5	291.3	245.2	456.9	1246.6	1889.9	1357.6	1085.8	621.5
82.5°	125.0	142.6	231.9	211.2	133.6	187.6	363.0	597.8	347.8	264.7	150.5
85°	76.5	95.3	182.0	134.7	75.2	85.6	123.2	166.3	106.2	88.6	54.0
87.5°	38.8	54.6	92.2	49.2	34.0	20.0	32.8	32.8	27.9	24.3	13.9
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°	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2	1653.2
2.5°	1659.3	1671.4	1692.1	1711.4	1726.6	1741.2	1755.7	1763.6	1766.1	1775.8	1781.2
5°	1678.6	1701.1	1741.2	1778.8	1802.5	1817.0	1827.4	1833.4	1834.6	1837.7	1842.5
7.5°	1714.5	1750.3	1806.2	1843.8	1861.4	1860.2	1855.9	1840.7	1834.6	1829.2	1830.4
10°	1764.8	1812.2	1880.8	1906.9	1895.9	1866.8	1829.2	1784.8	1764.2	1744.2	1738.2
12.5°	1827.4	1887.4	1954.8	1953.6	1899.6	1824.9	1737.6	1669.6	1626.5	1595.5	1588.2
15°	1903.2	1972.4	2024.0	1982.8	1864.4	1730.3	1602.2	1513.6	1474.8	1440.7	1437.2
17.5°	1981.5	2055.5	2079.2	1973.6	1775.8	1590.1	1445.0	1375.2	1337.0	1318.8	1324.2
20°	2058.0	2131.4	2112.0	1921.5	1641.0	1431.1	1301.8	1263.5	1255.6	1259.9	1258.1
22.5°	2138.7	2204.3	2118.7	1820.7	1469.3	1268.4	1197.4	1198.6	1216.3	1229.0	1232.0
25°	2221.3	2265.6	2101.0	1675.1	1284.8	1148.8	1131.3	1150.7	1185.3	1210.1	1216.8
27.5°	2300.7	2320.2	2062.8	1494.8	1126.4	1063.2	1066.3	1106.4	1158.6	1193.2	1201.6
30°	2390.6	2368.7	1989.4	1292.1	1016.6	989.8	1015.4	1062.1	1114.3	1145.2	1152.5
32.5°	2491.9	2410.6	1872.9	1104.5	938.9	931.0	972.8	1003.2	1026.2	1035.4	1040.2
35°	2618.2	2469.4	1723.5	972.8	869.1	887.9	927.9	912.8	903.6	898.8	903.6
37.5°	2782.1	2549.0	1548.8	887.2	812.6	856.9	873.3	825.9	790.2	772.5	776.8
40°	2979.3	2665.5	1380.7	821.1	776.8	830.2	801.8	744.7	699.2	674.2	676.1
42.5°	3198.3	2787.5	1239.3	771.4	756.8	808.4	748.9	680.9	607.5	599.6	607.5
45°	3428.3	2913.2	1142.8	733.1	747.1	789.6	718.5	608.7	556.6	588.7	605.7
47.5°	3658.3	3028.5	1084.6	704.6	742.2	768.3	691.9	568.7	531.7	578.4	600.2
50°	3914.5	3131.6	1058.4	684.0	736.8	759.8	651.8	558.3	505.5	536.5	559.5
52.5°	4168.8	3211.7	1039.0	663.4	728.9	753.2	632.4	546.2	474.0	475.8	488.5
55°	4422.5	3263.9	1017.7	636.0	711.2	738.6	630.6	532.9	450.3	441.8	447.9
57.5°	4693.2	3293.6	991.7	605.7	680.9	701.6	628.7	522.5	443.0	429.1	430.9
60°	4968.7	3337.3	957.7	568.7	640.3	657.2	624.5	518.9	438.8	415.1	417.0
62.5°	5215.7	3352.5	917.1	533.5	588.0	613.6	615.4	515.9	427.2	386.6	386.6
65°	5377.7	3287.0	846.0	493.4	531.7	568.7	597.8	505.5	406.6	365.9	365.9
67.5°	5371.0	3100.0	734.9	441.8	477.0	518.9	572.3	487.9	381.7	340.5	342.2
70°	5121.0	2731.0	594.2	381.7	417.0	465.5	539.6	461.9	352.0	312.5	316.2
72.5°	4392.1	2137.5	431.5	311.3	347.2	410.3	497.0	430.3	321.6	287.7	285.9
75°	3137.6	1352.8	292.5	239.1	270.1	347.8	444.2	393.3	293.8	288.8	272.5
77.5°	1602.8	646.4	193.6	174.8	188.1	274.3	373.2	351.4	298.0	238.5	212.4
80°	521.3	238.5	122.0	119.0	125.0	182.7	288.8	288.2	225.8	162.1	143.2
82.5°	166.3	102.6	79.5	76.5	73.4	114.7	201.5	228.2	152.3	102.6	102.0
85°	66.1	61.3	46.7	43.0	31.0	54.0	105.6	151.7	113.5	74.0	75.8
87.5°	24.3	24.3	12.7	9.1	6.7	18.2	28.5	45.5	65.0	38.2	37.6
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)