

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: P960883

Luminaire Tested: **NAV-SB1D-735-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960883
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10338.1 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

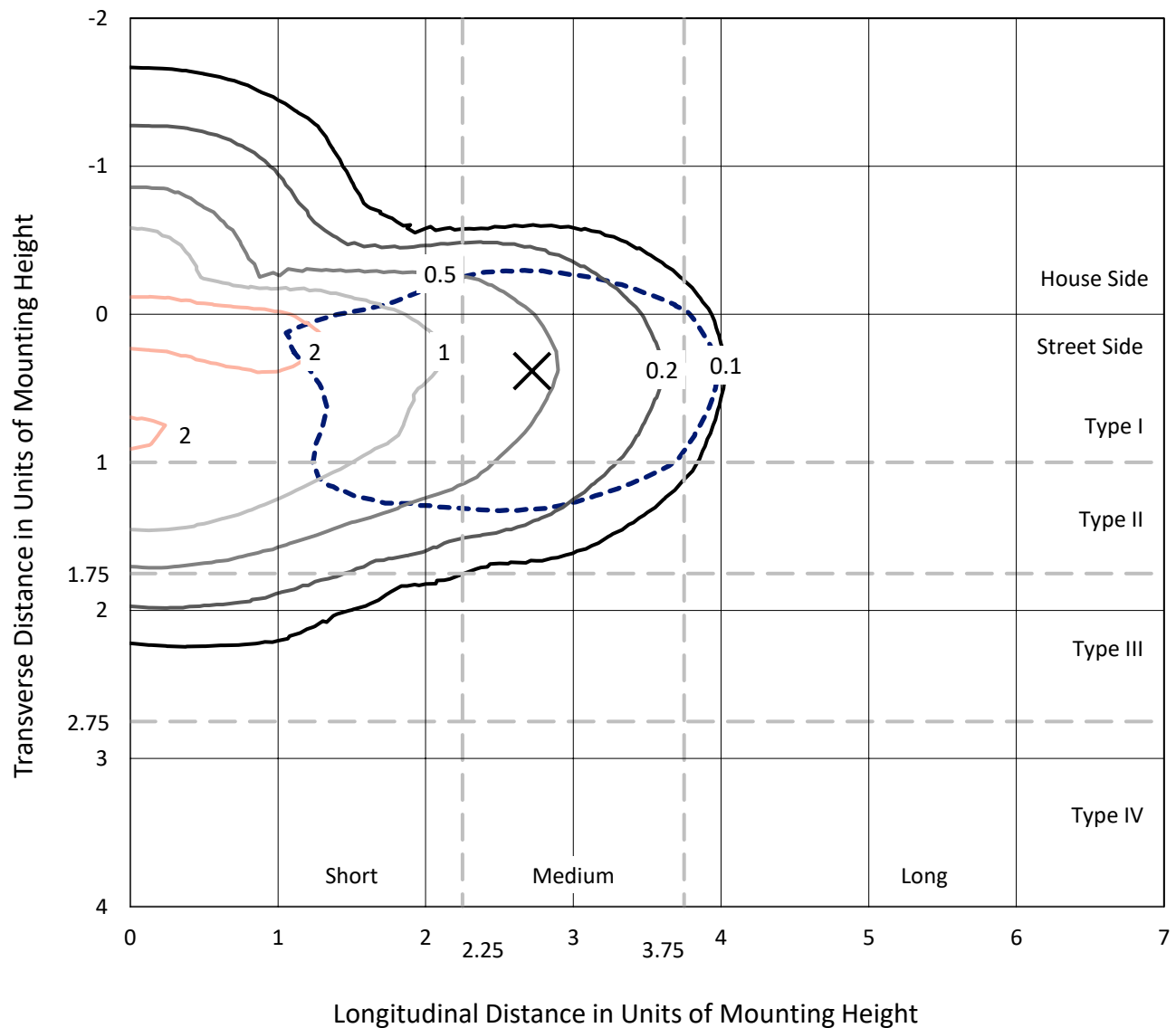
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

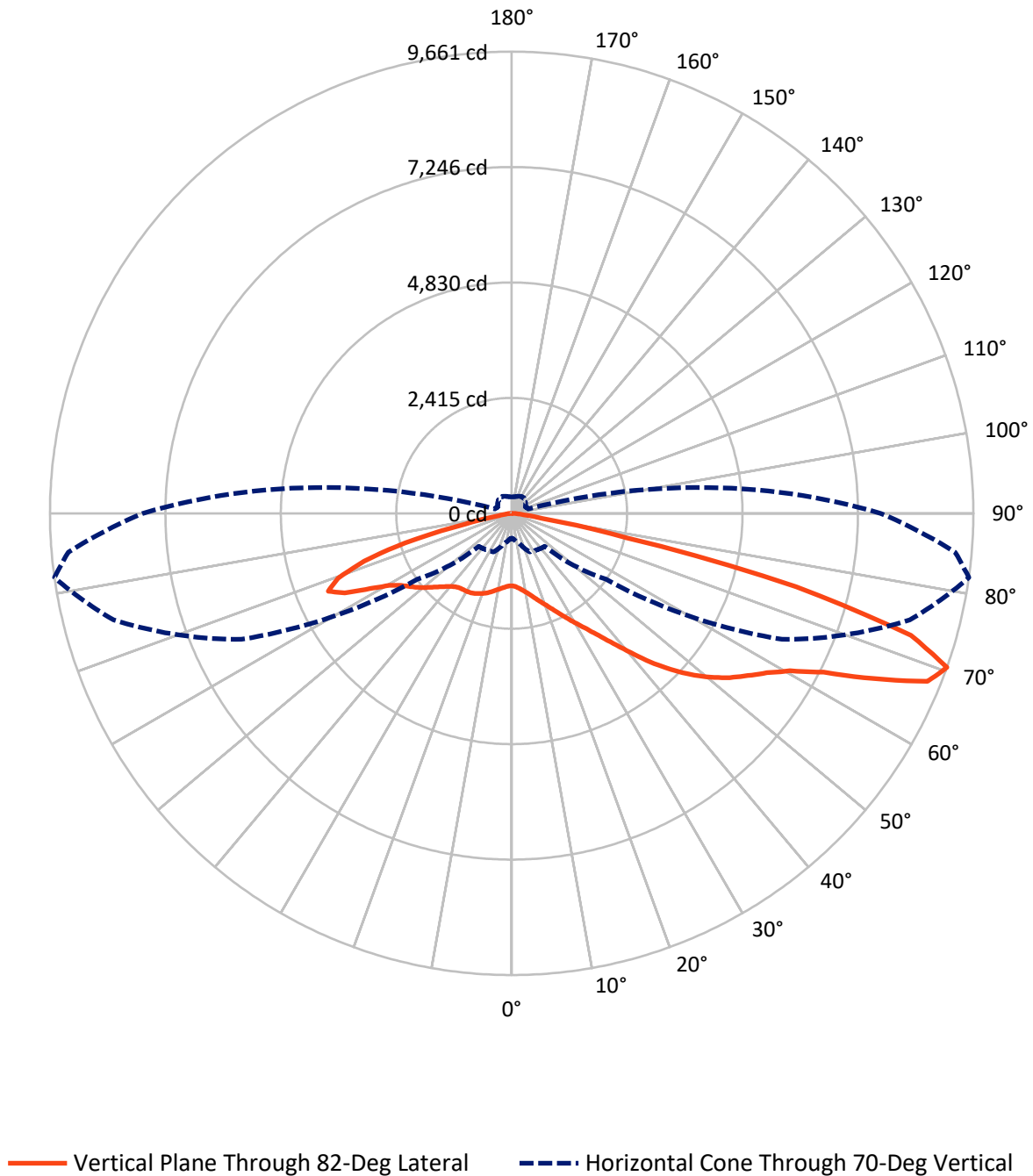
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2548.6	0.0	2548.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	7789.5	0.0	7789.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	10338.1	0.0	10338.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	1.4
10°-20°	411.2	4.0
20°-30°	687.8	6.7
30°-40°	1074.6	10.4
40°-50°	1711.4	16.6
50°-60°	2381.6	23.0
60°-70°	2491.3	24.1
70°-80°	1302.1	12.6
80°-90°	135.2	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°	10338.1	100.0
0°-180°	10338.1	100.0

Coefficient of Utilization



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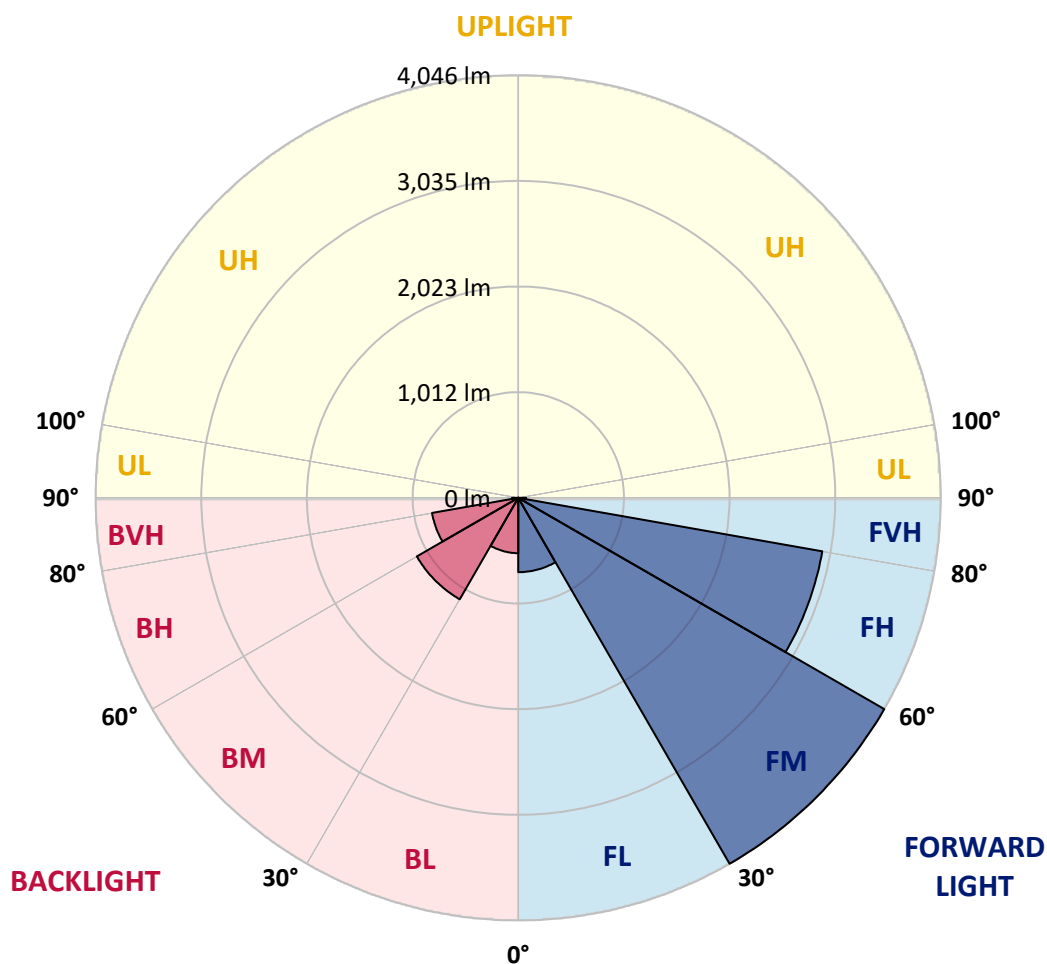
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	711.9	6.9			
FM	(30°-60°)	4046.2	39.1			
FH	(60°-80°)	2955.7	28.6			G2/5000
FVH	(80°-90°)	75.7	0.7			G1/100
BL	(0°-30°)	530.2	5.1	B2/1000		
BM	(30°-60°)	1121.3	10.8	B2/2500		
BH	(60°-80°)	837.6	8.1	B2/1000		G2/1000
BVH	(80°-90°)	59.5	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7
2.5°	1552.0	1560.7	1557.9	1555.2	1555.2	1551.3	1550.8	1545.3	1541.0	1533.8	1532.2
5°	1571.6	1581.0	1579.9	1582.1	1589.2	1590.9	1592.5	1589.2	1580.4	1571.6	1567.8
7.5°	1554.1	1564.6	1567.8	1581.0	1602.9	1622.7	1637.4	1643.5	1635.3	1622.7	1616.6
10°	1494.9	1506.3	1517.9	1549.2	1588.1	1634.8	1674.2	1697.8	1696.2	1684.1	1673.7
12.5°	1374.7	1386.8	1411.4	1472.4	1543.6	1626.0	1699.4	1748.9	1765.9	1757.1	1739.0
15°	1278.7	1289.1	1307.8	1370.3	1463.1	1588.1	1708.8	1804.8	1848.2	1843.2	1821.2
17.5°	1276.0	1280.3	1291.9	1321.5	1392.9	1528.9	1698.9	1859.7	1942.5	1942.0	1914.5
20°	1324.3	1325.9	1332.5	1338.5	1379.1	1483.9	1673.7	1905.2	2048.4	2048.4	2018.7
22.5°	1391.1	1390.1	1396.7	1391.1	1410.9	1480.0	1657.7	1945.2	2166.3	2175.0	2137.7
25°	1491.6	1486.0	1484.4	1471.8	1475.7	1515.7	1675.4	1990.8	2306.1	2324.3	2277.7
27.5°	1625.4	1616.6	1610.6	1581.6	1571.6	1589.2	1729.1	2045.6	2461.9	2493.2	2434.0
30°	1799.9	1783.9	1775.2	1724.7	1689.1	1691.8	1810.3	2118.6	2624.9	2675.4	2600.2
32.5°	2037.9	2013.3	1989.6	1906.8	1841.5	1820.2	1915.1	2219.5	2801.5	2882.2	2785.6
35°	2304.5	2284.8	2259.6	2131.8	2031.3	1981.9	2056.6	2360.5	3008.4	3136.2	3010.5
37.5°	2561.3	2544.3	2556.4	2384.0	2254.6	2182.7	2242.0	2549.8	3263.5	3452.2	3292.5
40°	2826.7	2813.6	2815.3	2650.6	2499.9	2419.2	2467.0	2787.3	3555.8	3828.0	3631.6
42.5°	3115.4	3105.4	3072.5	2926.6	2757.1	2682.0	2725.9	3061.6	3869.6	4255.8	4003.4
45°	3438.5	3432.4	3401.7	3234.4	3040.1	2955.7	3014.9	3364.4	4185.1	4658.4	4377.1
47.5°	3717.7	3722.6	3718.8	3577.8	3376.5	3252.4	3323.3	3680.4	4478.5	5037.0	4735.3
50°	3852.1	3877.9	3915.7	3871.8	3746.8	3620.6	3634.2	3985.4	4758.3	5391.9	5078.7
52.5°	3781.8	3830.6	3933.8	4004.1	4052.3	4026.0	3989.2	4288.2	5021.6	5712.2	5403.4
55°	3520.2	3588.7	3759.9	3929.4	4175.7	4367.2	4415.5	4623.9	5278.3	5994.2	5710.6
57.5°	3043.4	3154.8	3308.4	3651.3	4066.0	4532.3	4912.4	5089.6	5550.5	6295.4	6032.1
60°	2226.1	2375.3	2566.2	3076.4	3682.0	4444.0	5335.4	5805.0	5937.2	6685.5	6450.6
62.5°	1424.6	1516.8	1692.4	2172.9	2869.1	3991.5	5464.9	6699.2	6592.7	7325.1	7078.2
65°	975.4	1034.6	1195.4	1465.2	1854.7	2971.1	5118.1	7369.5	7633.9	8338.8	8151.2
67.5°	708.8	753.8	890.9	1127.3	1208.5	1758.2	3971.7	7338.8	8646.1	9383.3	9091.4
70°	516.8	548.6	663.8	890.9	929.8	978.1	2406.0	6238.4	8624.0	9660.9	9311.4
72.5°	382.9	404.9	482.2	691.2	752.7	660.5	1190.9	4534.0	7410.6	8738.2	8457.9
75°	277.1	293.5	350.5	528.8	602.3	503.1	594.1	2649.6	5169.2	6146.7	6196.1
77.5°	211.8	224.4	261.7	387.2	482.2	377.4	368.6	1218.9	2451.0	2463.1	2601.3
80°	170.0	178.2	198.5	272.6	369.7	282.5	240.3	492.1	774.6	655.6	687.9
82.5°	125.0	138.8	167.9	191.5	264.4	194.7	146.5	248.5	294.6	253.5	255.6
85°	71.3	80.7	101.5	137.1	168.9	119.0	83.9	110.3	137.1	112.4	100.3
87.5°	25.2	32.9	35.7	53.7	73.5	49.4	32.4	31.8	45.0	33.4	28.0
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°	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7	1515.7
2.5°	1526.6	1524.0	1513.0	1498.1	1482.8	1468.0	1463.1	1452.6	1445.5	1441.7	1446.1
5°	1557.4	1548.6	1522.8	1489.9	1455.4	1418.1	1391.7	1367.6	1350.0	1333.6	1340.2
7.5°	1601.3	1585.9	1541.5	1483.9	1422.5	1360.5	1314.4	1279.3	1255.7	1240.4	1243.6
10°	1652.3	1628.7	1560.7	1474.6	1379.6	1290.8	1236.5	1206.3	1191.5	1183.3	1185.4
12.5°	1711.0	1677.5	1580.4	1453.1	1314.4	1212.9	1175.6	1166.9	1167.4	1167.9	1169.0
15°	1783.4	1736.8	1596.3	1406.5	1229.4	1153.1	1146.5	1160.8	1175.6	1182.7	1182.1
17.5°	1865.2	1799.3	1599.1	1329.7	1145.9	1114.7	1135.5	1166.2	1188.8	1198.6	1200.8
20°	1952.9	1862.9	1579.3	1221.1	1077.4	1083.4	1120.7	1160.2	1184.9	1197.5	1200.8
22.5°	2053.3	1931.0	1532.2	1107.0	1021.4	1049.4	1093.3	1131.7	1157.5	1170.1	1173.4
25°	2168.0	2007.3	1458.1	1011.1	973.1	1011.1	1054.9	1086.7	1107.6	1119.1	1122.4
27.5°	2295.2	2086.8	1359.4	934.8	930.9	971.5	1007.7	1032.4	1043.3	1052.2	1055.4
30°	2423.0	2159.2	1239.7	877.2	894.2	932.5	958.4	969.3	972.6	974.3	978.1
32.5°	2561.3	2221.7	1114.2	829.4	859.1	894.7	910.1	915.0	899.6	889.2	892.6
35°	2728.5	2288.6	991.3	791.6	824.5	855.3	860.2	855.8	837.6	816.3	817.3
37.5°	2935.4	2372.1	893.1	764.8	792.1	812.4	806.4	805.3	807.0	781.7	783.4
40°	3188.9	2480.6	821.2	743.8	765.8	770.2	753.2	762.5	770.7	732.4	733.5
42.5°	3470.2	2611.7	775.7	729.6	743.8	733.5	707.1	717.5	716.5	665.9	665.4
45°	3757.1	2754.4	759.7	719.1	723.5	702.7	673.6	676.4	653.3	607.8	609.5
47.5°	4042.4	2907.4	769.7	710.4	698.3	674.8	652.2	640.2	606.2	572.2	572.2
50°	4322.2	3068.1	805.9	692.8	663.8	650.1	633.6	612.2	576.0	546.9	544.7
52.5°	4581.6	3230.0	846.4	663.8	620.4	628.6	618.3	593.6	557.9	528.3	528.8
55°	4827.4	3391.8	862.3	623.7	579.8	610.0	603.9	558.4	515.7	491.5	489.3
57.5°	5095.2	3586.6	844.8	572.7	546.9	588.7	565.6	515.1	490.5	472.3	470.7
60°	5465.9	3892.1	807.0	509.6	515.7	556.8	517.3	496.4	469.6	449.3	448.2
62.5°	6082.0	4462.0	746.1	447.1	478.9	509.6	494.3	473.4	446.0	426.2	426.2
65°	6992.7	5254.3	631.4	398.2	437.8	463.5	469.6	448.7	420.2	399.3	400.5
67.5°	7760.7	5751.2	477.9	357.6	395.5	426.2	443.2	422.9	392.8	372.5	373.0
70°	7718.4	5390.3	364.8	317.6	358.2	389.5	411.4	395.5	363.2	344.0	345.6
72.5°	6855.5	4509.3	295.1	277.1	320.4	351.1	377.4	365.3	332.4	313.8	313.8
75°	5036.4	3200.9	235.9	235.9	273.2	311.1	340.1	332.4	302.3	289.0	285.3
77.5°	2123.0	1342.9	184.9	195.9	227.1	267.1	303.4	306.1	279.7	296.2	268.8
80°	564.5	370.3	140.9	154.2	178.2	220.5	263.8	262.8	234.2	218.8	203.6
82.5°	215.0	146.0	100.3	108.6	128.9	168.9	209.0	215.6	187.1	161.8	161.8
85°	82.8	62.5	62.0	65.3	75.1	111.9	158.0	163.5	140.9	119.6	123.4
87.5°	21.4	18.7	23.1	21.9	34.5	59.8	90.5	93.8	86.1	49.9	71.3
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)