

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: P963701

Luminaire Tested: **NAV-SB3A-835-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963701
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13032.9 lumens
Efficiency: N/A
Efficacy: 153.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 84.7
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

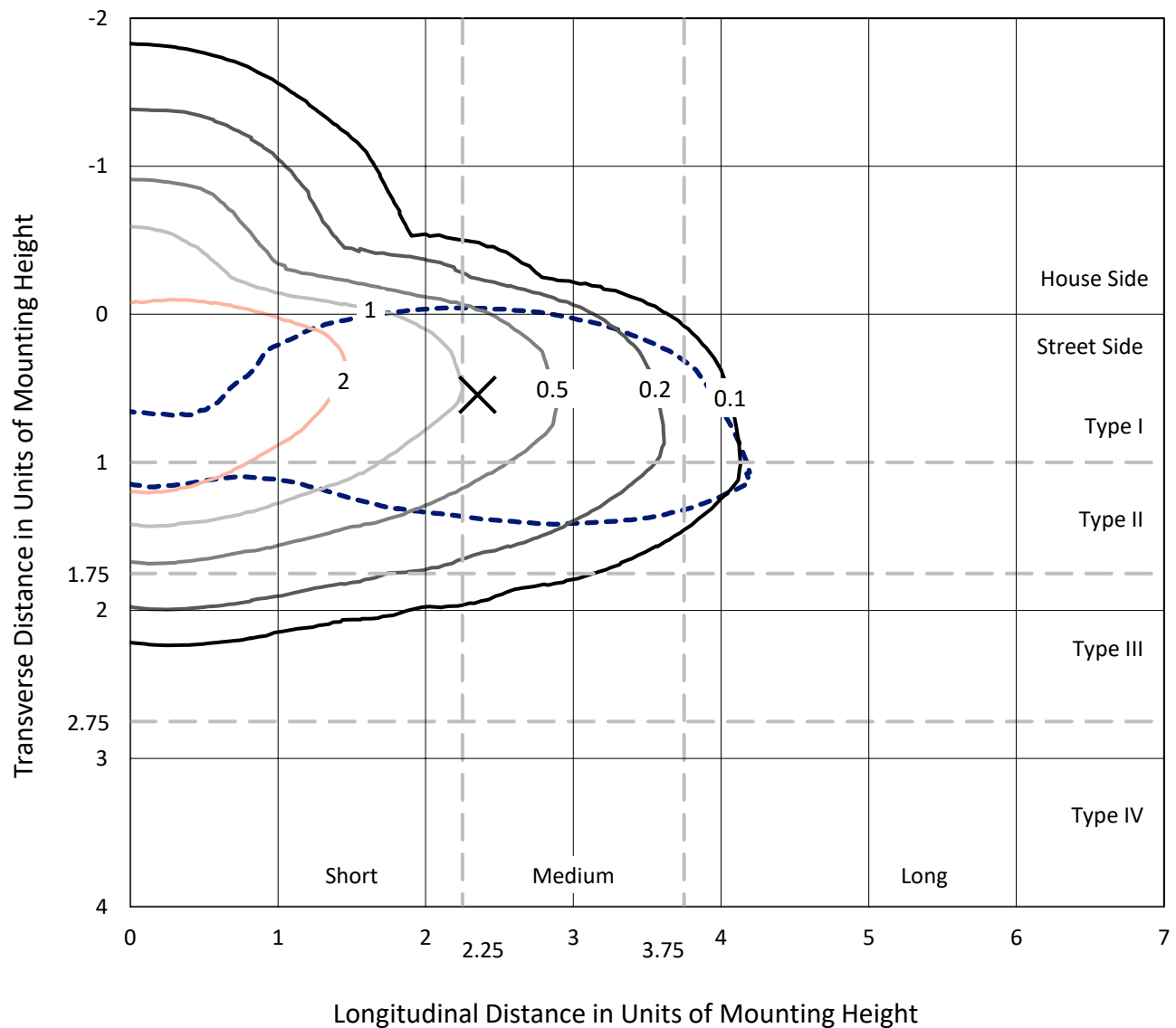


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Iso-Footcandle Lines of Horizontal Illumination

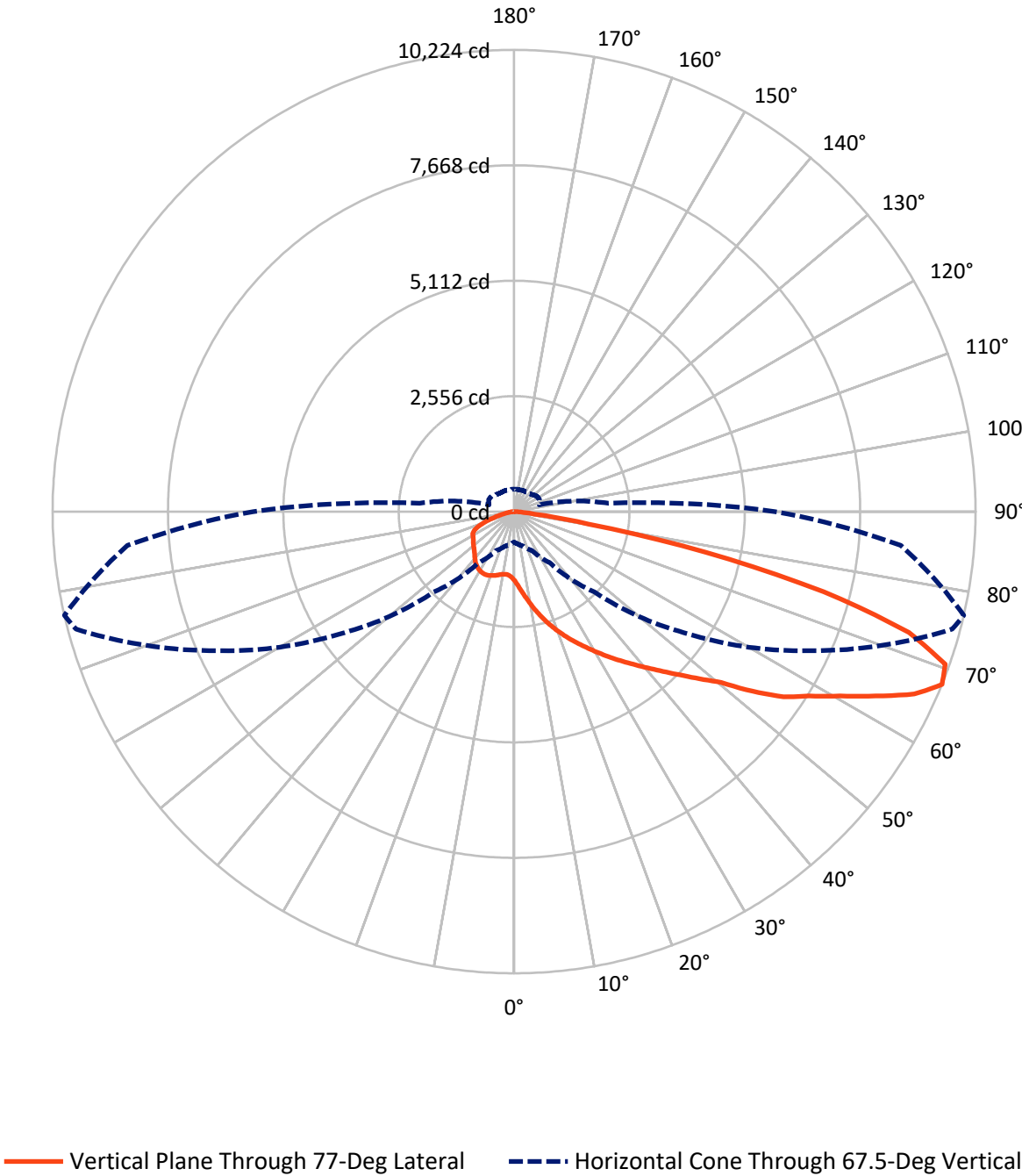
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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	2465.3	0.0	2465.3
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	10567.6	0.0	10567.6
	% Fixture	81.1	0.0	81.1
Total	Lumens	13032.9	0.0	13032.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.9	1.3
10°-20°	588.8	4.5
20°-30°	1111.8	8.5
30°-40°	1791.1	13.7
40°-50°	2449.9	18.8
50°-60°	2763.5	21.2
60°-70°	2579.4	19.8
70°-80°	1413.9	10.8
80°-90°	170.6	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°	13032.9	100.0
0°-180°	13032.9	100.0

Coefficient of Utilization



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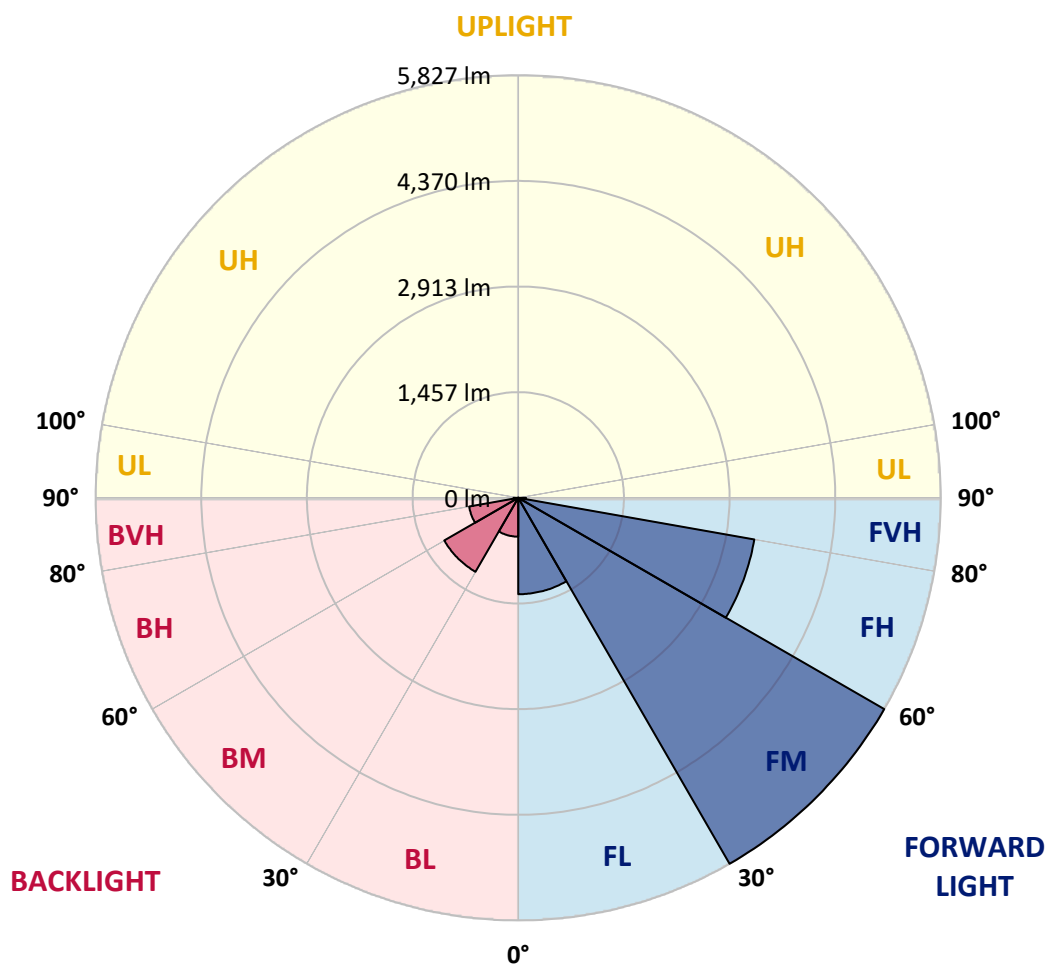
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1328.5	10.2			
FM	(30°-60°)	5826.9	44.7			
FH	(60°-80°)	3305.5	25.4			G2/5000
FVH	(80°-90°)	106.7	0.8			G2/225
BL	(0°-30°)	536.0	4.1	B2/1000		
BM	(30°-60°)	1177.6	9.0	B2/2500		
BH	(60°-80°)	687.8	5.3	B2/1000		G2/1000
BVH	(80°-90°)	63.9	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2
2.5°	1914.6	1928.1	1911.3	1911.3	1854.7	1825.2	1768.6	1725.6	1648.2	1634.8	1583.6
5°	2263.1	2279.9	2256.4	2246.3	2179.7	2118.5	2023.7	1930.1	1792.2	1778.1	1657.6
7.5°	2532.9	2554.4	2533.6	2522.8	2463.6	2395.0	2284.0	2153.4	1959.1	1931.5	1757.3
10°	2752.8	2756.2	2749.6	2753.6	2707.1	2650.6	2537.0	2384.9	2142.0	2104.3	1877.6
12.5°	2877.4	2892.9	2906.3	2930.5	2922.4	2887.4	2785.2	2603.5	2335.8	2287.4	2008.8
15°	2935.9	2962.8	2993.1	3048.9	3094.0	3102.7	3024.7	2838.3	2532.9	2474.4	2141.3
17.5°	2956.7	2982.3	3030.1	3110.8	3207.6	3272.9	3238.0	3066.4	2728.0	2660.7	2280.6
20°	3062.4	3069.8	3098.7	3175.3	3280.3	3388.6	3414.9	3285.7	2921.0	2845.1	2424.6
22.5°	3288.4	3273.6	3281.6	3316.7	3392.0	3497.0	3556.9	3479.5	3119.6	3032.1	2569.9
25°	3661.8	3618.8	3575.7	3535.3	3573.7	3632.8	3700.8	3673.2	3327.5	3216.4	2716.6
27.5°	4133.4	4080.9	3986.0	3853.5	3807.1	3828.0	3858.2	3852.9	3519.8	3407.5	2868.0
30°	4597.5	4536.3	4423.3	4231.6	4109.1	4054.0	4031.1	4015.6	3729.1	3609.3	3020.7
32.5°	4968.3	4919.8	4808.8	4594.3	4416.6	4322.4	4246.4	4191.2	3947.7	3828.0	3182.1
35°	5292.5	5247.5	5120.3	4886.2	4693.1	4592.8	4493.3	4375.5	4175.1	4054.0	3355.6
37.5°	5588.5	5543.5	5369.3	5125.7	4931.3	4862.0	4773.1	4573.3	4403.2	4288.8	3539.3
40°	5775.6	5765.4	5602.6	5326.8	5125.0	5090.7	5061.1	4802.7	4656.1	4549.8	3741.1
42.5°	5823.3	5845.6	5716.3	5489.6	5297.2	5269.6	5338.9	5062.5	4940.0	4838.4	3969.9
45°	5708.3	5772.2	5687.4	5533.4	5419.7	5404.8	5585.1	5346.3	5254.2	5161.4	4245.8
47.5°	5417.0	5525.3	5490.3	5468.8	5452.6	5516.5	5801.8	5647.7	5610.0	5529.4	4560.5
50°	4829.0	5034.2	5095.4	5231.3	5387.4	5603.4	5998.9	5976.7	6025.9	5944.4	4944.1
52.5°	3812.5	4095.1	4450.2	4790.6	5186.9	5574.4	6215.5	6449.0	6656.1	6611.8	5553.6
55°	3147.2	3274.3	3547.4	4171.8	4798.0	5452.6	6313.1	6830.4	7281.8	7242.1	6015.7
57.5°	2635.8	2749.6	2917.8	3439.1	4210.1	5176.1	6373.7	7063.2	7710.4	7706.4	6471.8
60°	2087.5	2208.0	2380.2	2749.6	3523.2	4698.5	6360.2	7328.2	8257.3	8291.0	7028.2
62.5°	1468.6	1601.2	1792.2	2136.6	2821.5	4079.6	6085.7	7520.0	8901.2	8992.6	7697.6
65°	965.4	1052.9	1196.8	1494.1	2102.4	3283.7	5561.6	7544.9	9590.0	9744.8	8326.0
67.5°	676.8	710.4	795.2	956.6	1385.9	2518.1	4726.8	7287.2	10049.5	10223.8	8598.4
70°	528.1	544.9	587.9	652.6	870.5	1693.3	3622.0	6617.2	9951.3	10132.9	8313.9
72.5°	456.1	472.3	488.4	496.5	583.9	1045.5	2453.5	5532.7	9026.3	9149.4	7228.7
75°	413.8	417.8	431.2	428.6	445.4	678.1	1416.1	4031.1	7121.7	7079.4	5336.3
77.5°	347.8	353.2	375.4	372.1	395.5	463.5	735.3	2601.6	4617.1	4329.2	2970.1
80°	294.7	297.4	321.5	317.5	343.8	335.7	375.4	1325.9	1958.4	1659.0	856.4
82.5°	102.3	126.5	245.6	253.0	262.4	203.2	216.6	540.9	598.1	458.2	179.6
85°	49.8	53.2	125.2	177.6	176.9	102.3	105.6	193.1	188.4	148.0	59.9
87.5°	8.1	10.0	14.8	69.3	55.1	27.0	36.3	37.7	39.1	33.6	13.4
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°	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2	1529.2
2.5°	1546.0	1512.4	1441.7	1376.5	1325.3	1276.2	1248.7	1225.1	1211.7	1208.9	1208.9
5°	1587.7	1518.4	1389.9	1281.6	1210.9	1158.5	1130.9	1113.4	1104.6	1099.3	1098.6
7.5°	1647.6	1546.0	1362.9	1239.8	1165.8	1128.2	1114.1	1111.4	1110.7	1111.4	1113.4
10°	1730.3	1591.0	1360.3	1229.8	1167.9	1147.1	1146.4	1147.1	1149.7	1150.4	1151.1
12.5°	1819.8	1637.4	1371.0	1238.5	1193.5	1182.0	1180.0	1179.4	1181.3	1182.6	1183.4
15°	1917.4	1698.7	1389.2	1257.4	1221.7	1209.6	1207.6	1203.6	1202.8	1202.2	1201.5
17.5°	2017.6	1759.2	1409.4	1277.6	1239.8	1223.0	1215.6	1206.2	1198.8	1196.8	1198.8
20°	2119.2	1819.1	1423.5	1287.6	1241.3	1217.7	1202.8	1186.7	1173.9	1166.6	1169.2
22.5°	2227.4	1881.7	1432.3	1284.9	1229.1	1196.8	1169.9	1151.1	1131.6	1118.8	1119.5
25°	2333.1	1936.2	1431.6	1270.8	1205.6	1164.5	1130.3	1106.0	1079.1	1065.6	1065.6
27.5°	2434.7	1985.3	1414.8	1245.9	1171.9	1126.2	1085.2	1056.3	1030.0	1017.2	1016.5
30°	2539.6	2026.3	1388.6	1209.6	1132.2	1081.8	1036.7	1011.8	988.3	976.2	975.5
32.5°	2643.9	2064.0	1351.6	1164.5	1086.5	1038.0	993.6	970.8	956.6	956.6	957.4
35°	2754.3	2090.3	1302.5	1112.0	1038.0	991.6	956.6	943.2	941.9	933.8	931.7
37.5°	2870.6	2107.1	1242.6	1058.2	990.3	946.6	935.8	919.6	906.2	888.7	886.0
40°	2993.1	2123.9	1170.6	1002.3	939.8	915.6	910.9	889.4	851.1	808.0	802.0
42.5°	3141.7	2135.3	1095.9	946.6	886.7	878.6	885.3	848.3	787.1	754.8	755.5
45°	3313.9	2154.1	1027.3	891.4	832.2	832.2	860.5	812.0	761.6	741.4	744.8
47.5°	3537.3	2197.9	963.4	830.9	781.8	795.2	805.2	768.2	740.0	715.1	714.4
50°	3860.3	2302.9	897.5	769.7	743.4	770.3	756.1	734.6	701.7	681.5	679.5
52.5°	4261.2	2364.7	839.0	714.4	710.4	737.4	717.2	697.0	672.1	645.1	639.8
55°	4534.3	2376.2	789.8	674.1	688.2	685.5	678.1	660.0	646.5	610.9	611.5
57.5°	4839.7	2399.0	749.5	649.8	674.1	644.5	641.8	626.4	608.8	584.7	576.6
60°	5205.1	2434.7	714.4	640.4	661.9	617.6	604.1	598.1	580.6	568.5	571.8
62.5°	5603.4	2467.0	678.8	641.8	647.9	591.3	571.1	569.2	558.4	554.3	554.3
65°	5875.1	2378.8	634.4	640.4	625.7	564.5	538.8	538.2	529.4	528.1	527.5
67.5°	5780.3	2099.6	574.5	621.7	602.8	537.5	509.3	506.6	495.2	495.8	495.8
70°	5305.3	1701.4	491.8	575.2	574.5	513.3	478.4	469.6	454.1	456.8	459.5
72.5°	4414.6	1260.8	380.8	497.8	529.4	491.1	442.7	428.6	409.1	411.7	411.0
75°	3188.2	857.1	277.2	378.7	460.8	464.8	407.6	383.5	359.9	364.0	365.3
77.5°	1631.4	485.7	203.9	261.1	361.9	422.5	376.1	343.8	338.4	376.1	370.6
80°	532.2	243.5	141.2	183.0	237.5	345.8	329.6	292.6	291.3	300.0	257.7
82.5°	158.8	102.9	90.8	120.4	131.2	265.1	284.5	221.3	190.3	200.5	207.3
85°	54.5	49.8	51.8	59.9	62.5	155.4	199.2	146.7	138.6	152.7	150.7
87.5°	12.8	17.5	14.8	13.4	13.4	37.7	77.4	61.2	84.8	56.5	54.5
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)