

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: P965034

Luminaire Tested: **NAV-SB3D-727-U-T2R**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965034  
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-SB3D-727-U-T2R  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29566.1 lumens  
Efficiency: N/A  
Efficacy: 135.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

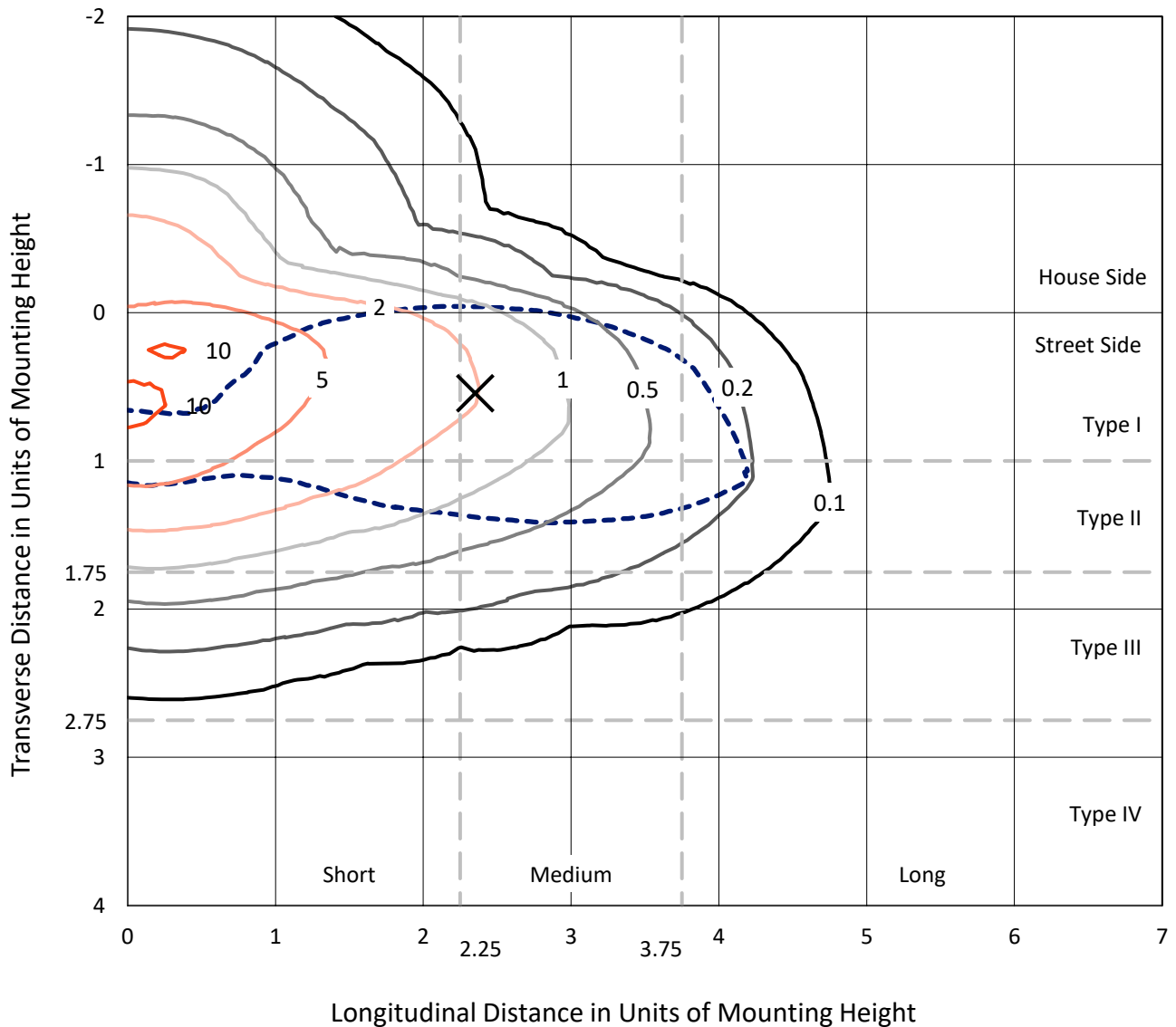
Input Watts (W): 218.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

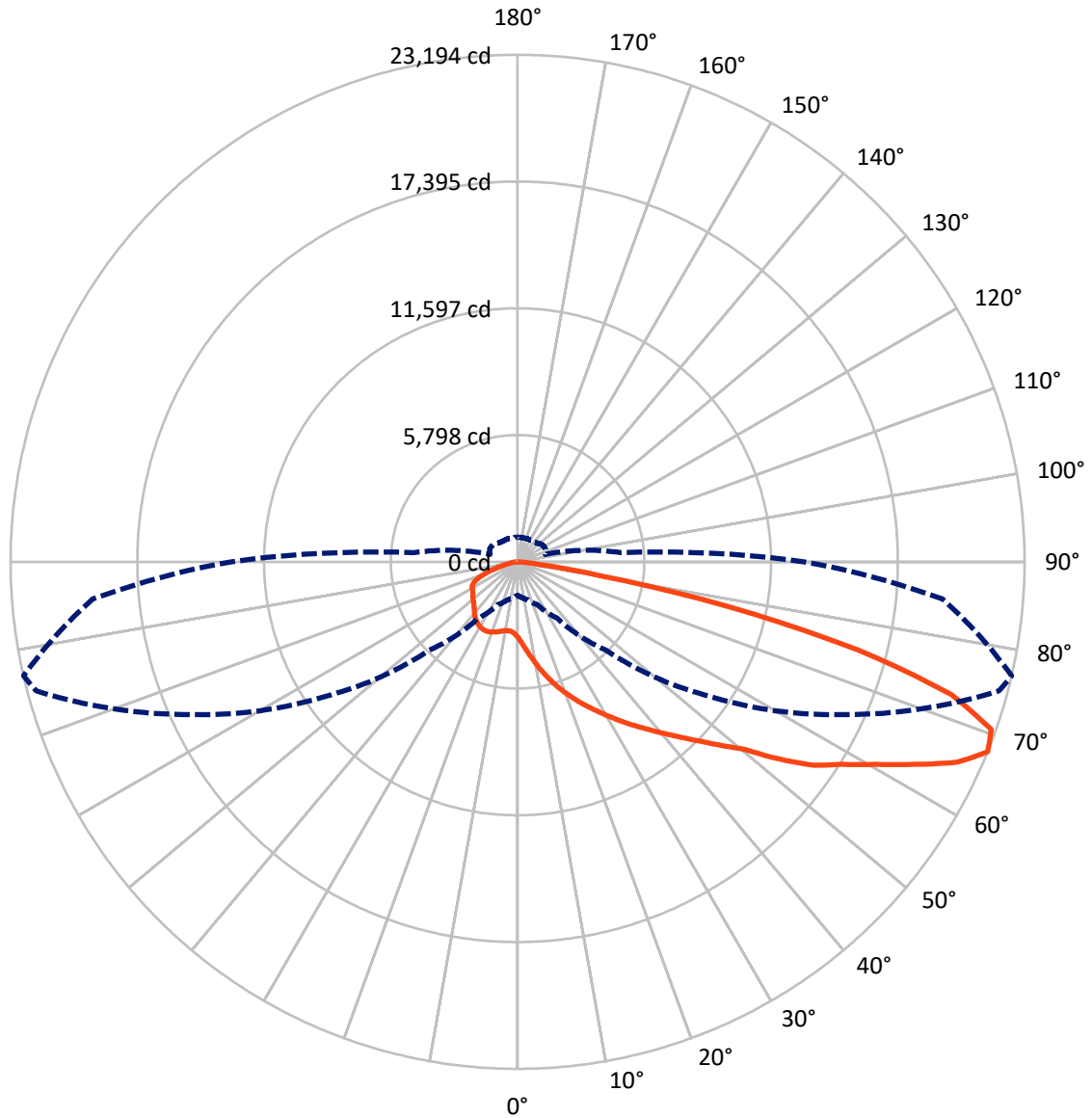
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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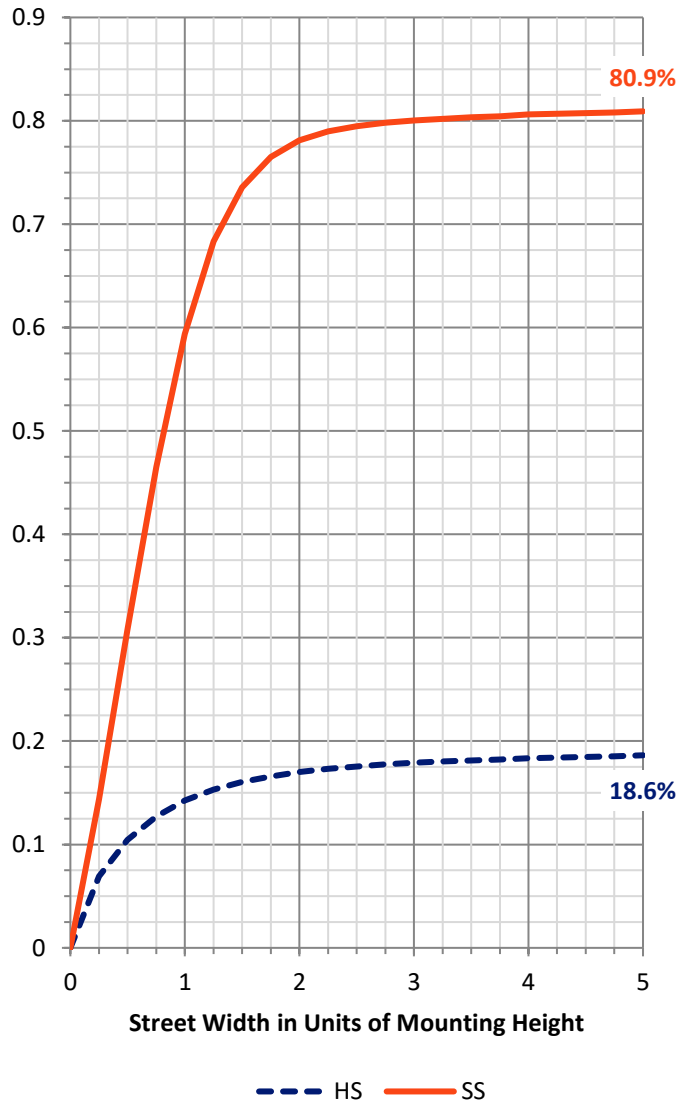
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5592.7	0.0	5592.7
	% Fixture	18.9	0.0	18.9
<b>Street Side</b>	Lumens	23973.4	0.0	23973.4
	% Fixture	81.1	0.0	81.1
<b>Total</b>	Lumens	29566.1	0.0	29566.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	371.8	1.3
10°-20°	1335.8	4.5
20°-30°	2522.2	8.5
30°-40°	4063.2	13.7
40°-50°	5557.8	18.8
50°-60°	6269.2	21.2
60°-70°	5851.5	19.8
70°-80°	3207.6	10.8
80°-90°	386.9	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°	29566.1	100.0
0°-180°	29566.1	100.0

**Coefficient of Utilization**

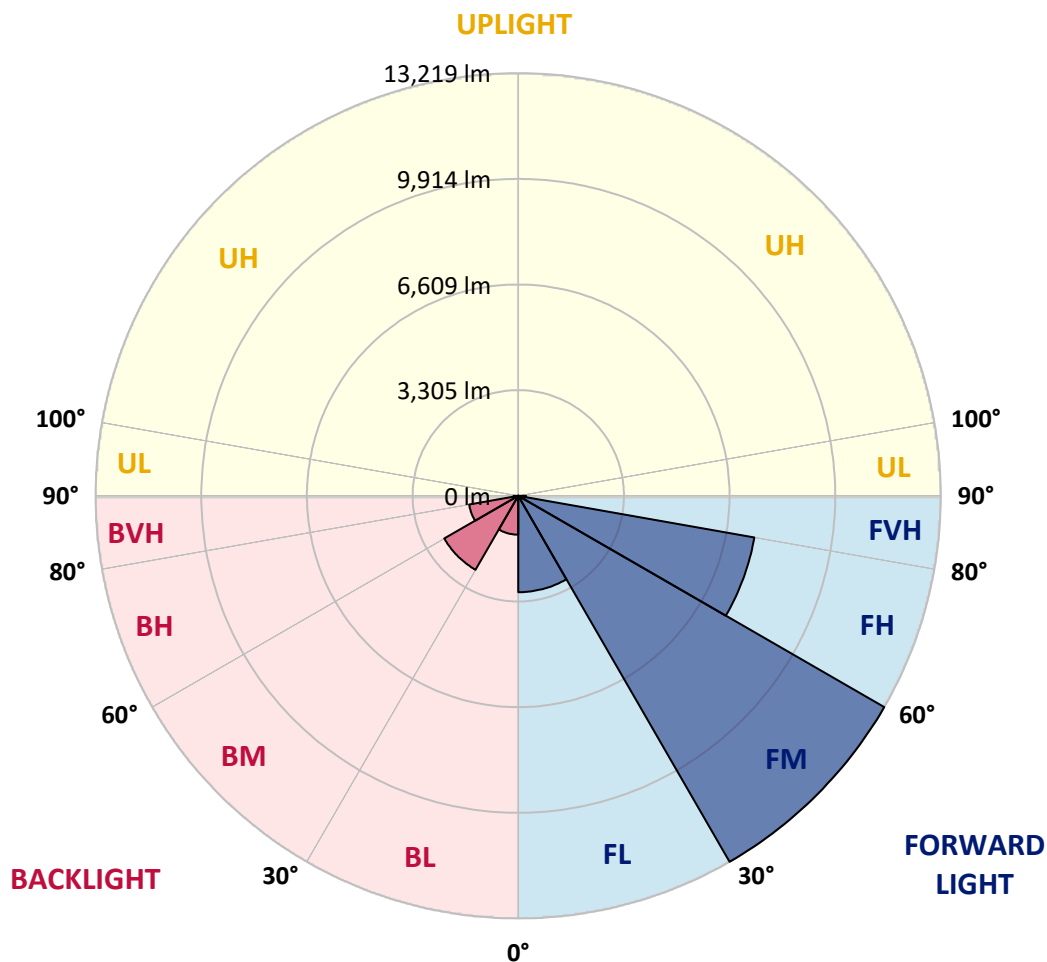


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3013.9	10.2			
FM (30°-60°)	13218.7	44.7			
FH (60°-80°)	7498.8	25.4			G3/7500
FVH (80°-90°)	242.0	0.8			G3/500
BL (0°-30°)	1216.0	4.1	B3/2500		
BM (30°-60°)	2671.5	9.0	B3/5000		
BH (60°-80°)	1560.3	5.3	B3/2500		G3/2500
BVH (80°-90°)	144.9	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0
2.5°	4343.5	4374.1	4335.9	4335.9	4207.7	4140.6	4012.4	3914.7	3739.2	3708.7	3592.6
5°	5134.1	5172.3	5118.8	5096.0	4944.8	4805.9	4590.8	4378.6	4065.8	4033.7	3760.5
7.5°	5746.0	5794.9	5747.6	5723.2	5588.9	5433.2	5181.4	4885.4	4444.3	4381.7	3986.4
10°	6245.1	6252.8	6237.5	6246.7	6141.4	6013.2	5755.3	5410.4	4859.4	4773.9	4259.6
12.5°	6527.5	6562.6	6593.1	6648.0	6629.8	6550.4	6318.4	5906.4	5298.9	5189.1	4557.2
15°	6660.2	6721.3	6790.0	6916.7	7018.9	7038.8	6861.8	6438.9	5746.0	5613.3	4857.9
17.5°	6707.6	6765.6	6874.0	7057.1	7276.9	7424.9	7345.6	6956.4	6188.6	6036.1	5173.8
20°	6947.2	6964.0	7029.7	7203.6	7441.7	7687.4	7746.9	7453.9	6626.7	6454.2	5500.4
22.5°	7460.1	7426.4	7444.8	7524.1	7695.1	7933.1	8069.0	7893.4	7076.9	6878.6	5830.0
25°	8307.0	8209.3	8111.6	8020.1	8107.1	8241.4	8395.6	8332.9	7548.5	7296.7	6162.7
27.5°	9376.9	9257.9	9042.7	8742.0	8636.6	8684.0	8752.7	8740.5	7985.1	7730.1	6506.2
30°	10430.0	10291.1	10034.6	9599.7	9322.0	9196.8	9144.9	9109.8	8459.6	8188.0	6852.5
32.5°	11270.9	11161.0	10909.2	10422.3	10019.4	9805.8	9633.3	9508.1	8955.6	8684.0	7218.9
35°	12006.5	11904.2	11615.8	11084.7	10646.7	10419.3	10193.4	9926.3	9471.5	9196.8	7612.7
37.5°	12678.0	12575.8	12180.5	11628.0	11187.0	11029.7	10828.3	10375.0	9988.9	9729.4	8029.2
40°	13102.4	13079.4	12710.1	12084.3	11626.5	11548.7	11481.5	10895.4	10562.7	10321.6	8487.1
42.5°	13210.7	13261.0	12968.0	12453.6	12017.2	11954.7	12111.8	11484.6	11206.8	10976.3	9006.1
45°	12949.7	13094.7	12902.4	12552.9	12295.0	12261.4	12670.4	12128.6	11919.5	11708.9	9631.8
47.5°	12288.8	12534.6	12455.2	12406.4	12369.8	12514.7	13161.8	12812.4	12726.9	12543.7	10346.0
50°	10955.0	11420.4	11559.3	11867.7	12221.7	12711.6	13609.0	13558.7	13670.0	13485.4	11216.0
52.5°	8648.9	9289.9	10095.7	10868.0	11766.9	12646.0	14100.4	14630.0	15100.1	14999.3	12598.7
55°	7139.5	7428.0	8047.6	9463.9	10884.8	12369.8	14321.7	15495.3	16519.4	16429.4	13647.2
57.5°	5979.6	6237.5	6619.0	7801.9	9550.8	11742.5	14459.1	16023.4	17491.6	17482.5	14681.9
60°	4735.8	5009.0	5399.7	6237.5	7992.6	10658.9	14428.6	16624.8	18732.4	18808.8	15944.1
62.5°	3331.7	3632.3	4065.8	4847.1	6400.8	9254.8	13805.9	17059.7	20193.0	20400.6	17462.6
65°	2190.1	2388.5	2715.1	3389.7	4769.3	7449.3	12617.0	17116.2	21755.8	22106.8	18888.1
67.5°	1535.3	1611.6	1804.0	2170.2	3144.0	5712.5	10723.0	16531.7	22798.2	23193.5	19506.2
70°	1198.0	1236.3	1333.9	1480.4	1974.9	3841.4	8217.0	15011.5	22575.4	22987.5	18860.6
72.5°	1034.7	1071.4	1108.0	1126.4	1324.7	2371.6	5566.1	12551.3	20476.8	20756.1	16398.9
75°	938.6	947.7	978.3	972.2	1010.3	1538.4	3212.7	9144.9	16156.3	16060.1	12105.8
77.5°	789.0	801.2	851.6	844.0	897.4	1051.5	1668.1	5901.7	10474.3	9821.0	6738.1
80°	668.5	674.6	729.5	720.4	779.9	761.6	851.6	3008.1	4442.8	3763.6	1942.9
82.5°	232.0	286.9	557.1	573.9	595.2	460.9	491.4	1227.0	1356.8	1039.4	407.5
85°	113.0	120.5	283.8	402.9	401.4	232.0	239.6	438.0	427.3	335.8	135.8
87.5°	18.3	22.9	33.6	157.2	125.2	61.1	82.4	85.5	88.6	76.3	30.5
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°	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0	3469.0
2.5°	3507.1	3430.9	3270.6	3122.6	3006.6	2895.2	2832.6	2779.2	2748.6	2742.6	2742.6
5°	3601.8	3444.6	3153.1	2907.4	2747.1	2628.1	2565.5	2525.8	2506.0	2493.8	2492.3
7.5°	3737.7	3507.1	3092.0	2812.8	2644.9	2559.4	2527.3	2521.3	2519.8	2521.3	2525.8
10°	3925.3	3609.4	3086.0	2789.8	2649.4	2602.2	2600.6	2602.2	2608.2	2609.8	2611.3
12.5°	4128.3	3714.7	3110.4	2809.7	2707.4	2681.5	2676.9	2675.5	2680.0	2683.0	2684.6
15°	4349.6	3853.6	3151.6	2852.5	2771.6	2744.1	2739.5	2730.4	2728.9	2727.3	2725.8
17.5°	4577.0	3990.9	3197.4	2898.2	2812.8	2774.6	2757.9	2736.4	2719.6	2715.1	2719.6
20°	4807.5	4126.9	3229.4	2921.1	2815.8	2762.4	2728.9	2692.2	2663.2	2646.4	2652.5
22.5°	5053.2	4268.7	3249.2	2915.0	2788.3	2715.1	2654.0	2611.3	2567.0	2538.0	2539.5
25°	5292.8	4392.3	3247.7	2883.0	2734.9	2641.8	2564.0	2509.1	2448.0	2417.5	2417.5
27.5°	5523.3	4503.7	3209.6	2826.5	2658.6	2554.8	2461.7	2396.1	2336.6	2307.6	2306.0
30°	5761.3	4596.9	3150.0	2744.1	2568.5	2454.2	2351.9	2295.4	2242.0	2214.5	2213.0
32.5°	5997.9	4682.3	3066.1	2641.8	2464.8	2354.9	2254.2	2202.3	2170.2	2170.2	2171.8
35°	6248.2	4741.9	2954.7	2522.8	2354.9	2249.6	2170.2	2139.7	2136.6	2118.4	2113.8
37.5°	6512.2	4780.0	2818.9	2400.7	2246.6	2147.4	2122.9	2086.3	2055.7	2016.1	2010.0
40°	6790.0	4818.2	2655.6	2274.1	2132.1	2077.2	2066.5	2017.6	1930.6	1832.9	1819.2
42.5°	7127.3	4844.2	2486.1	2147.4	2011.6	1993.2	2008.5	1924.5	1785.7	1712.4	1713.9
45°	7518.0	4886.9	2330.4	2022.2	1887.8	1887.8	1952.0	1842.1	1727.6	1681.8	1689.5
47.5°	8024.7	4986.0	2185.5	1884.9	1773.5	1804.0	1826.9	1742.9	1678.8	1622.4	1620.8
50°	8757.3	5224.1	2036.0	1746.0	1686.4	1747.5	1715.4	1666.5	1591.8	1546.0	1541.5
52.5°	9666.9	5364.5	1903.1	1620.8	1611.6	1672.7	1626.9	1581.2	1524.7	1463.6	1451.4
55°	10286.5	5390.5	1791.7	1529.2	1561.3	1555.2	1538.4	1497.2	1466.7	1385.8	1387.3
57.5°	10979.4	5442.3	1700.2	1474.3	1529.2	1462.1	1456.0	1420.9	1381.2	1326.2	1307.9
60°	11808.1	5523.3	1620.8	1452.9	1501.7	1401.1	1370.5	1356.8	1317.1	1289.7	1297.2
62.5°	12711.6	5596.5	1540.0	1456.0	1469.7	1341.5	1295.7	1291.2	1266.7	1257.6	1257.6
65°	13328.2	5396.6	1439.2	1452.9	1419.3	1280.4	1222.5	1221.0	1201.1	1198.0	1196.5
67.5°	13113.0	4763.3	1303.4	1410.2	1367.5	1219.4	1155.3	1149.2	1123.3	1124.8	1124.8
70°	12035.6	3859.7	1115.6	1304.9	1303.4	1164.5	1085.2	1065.3	1030.2	1036.3	1042.4
72.5°	10014.9	2860.1	863.9	1129.3	1201.1	1114.1	1004.2	972.2	927.9	934.0	932.5
75°	7232.6	1944.3	628.8	859.3	1045.4	1054.6	924.9	869.9	816.5	825.6	828.7
77.5°	3701.0	1101.9	462.5	592.1	821.1	958.5	853.1	779.9	767.6	853.1	840.9
80°	1207.2	552.5	320.5	415.1	538.7	784.4	747.8	663.9	660.8	680.7	584.6
82.5°	360.2	233.5	206.0	273.2	297.6	601.4	645.5	502.1	431.9	454.8	470.1
85°	123.6	113.0	117.6	135.8	142.0	352.6	451.7	332.7	314.4	346.4	341.8
87.5°	29.0	39.7	33.6	30.5	30.5	85.5	175.5	138.9	192.3	128.2	123.6
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)