

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: P881729

Luminaire Tested: **NAV-SB1B-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881729  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

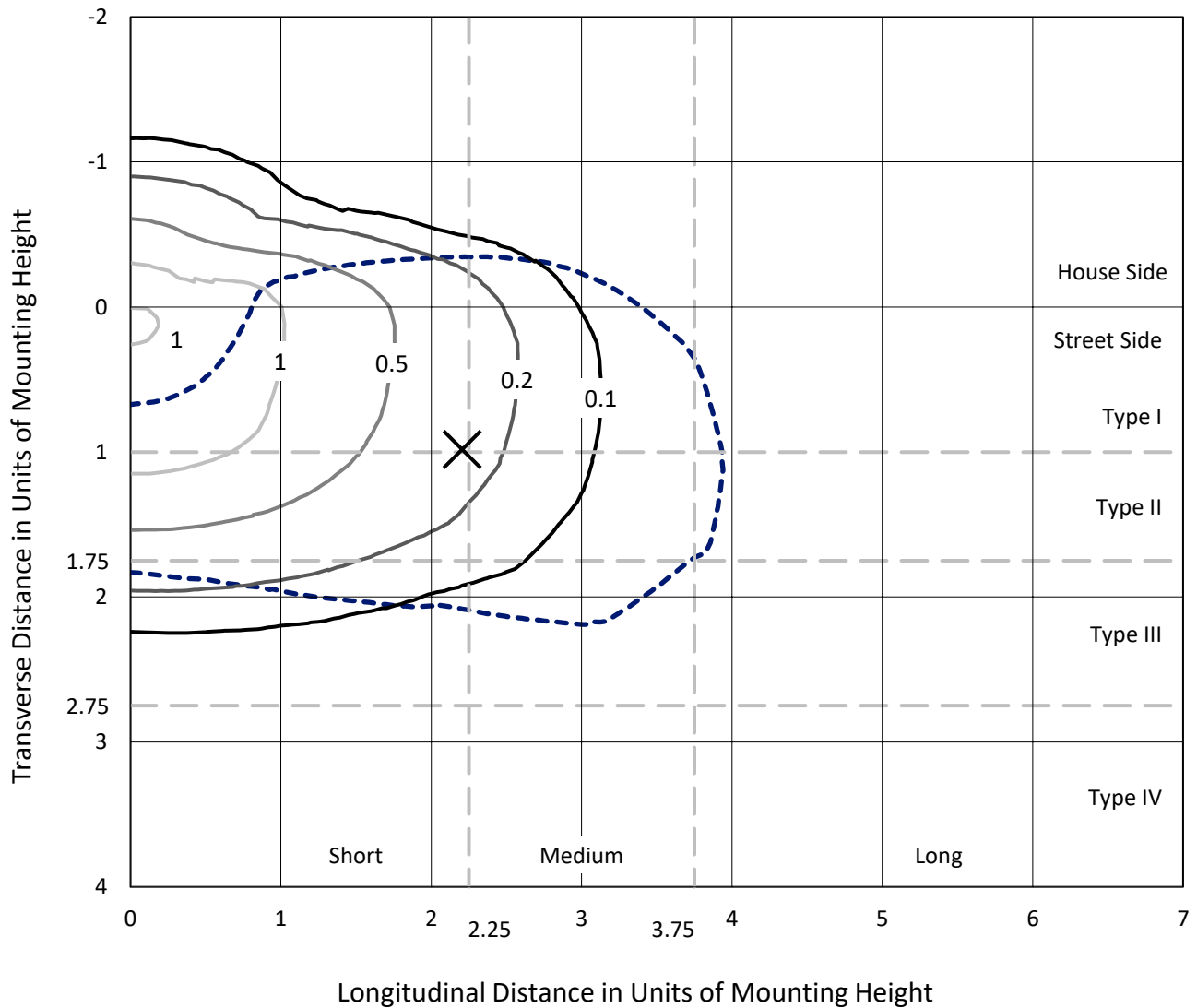
Lumens per Lamp: N/A  
Luminaire Lumens: 5640 lumens  
Efficiency: N/A  
Efficacy: 141.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 0.33  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.305  
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

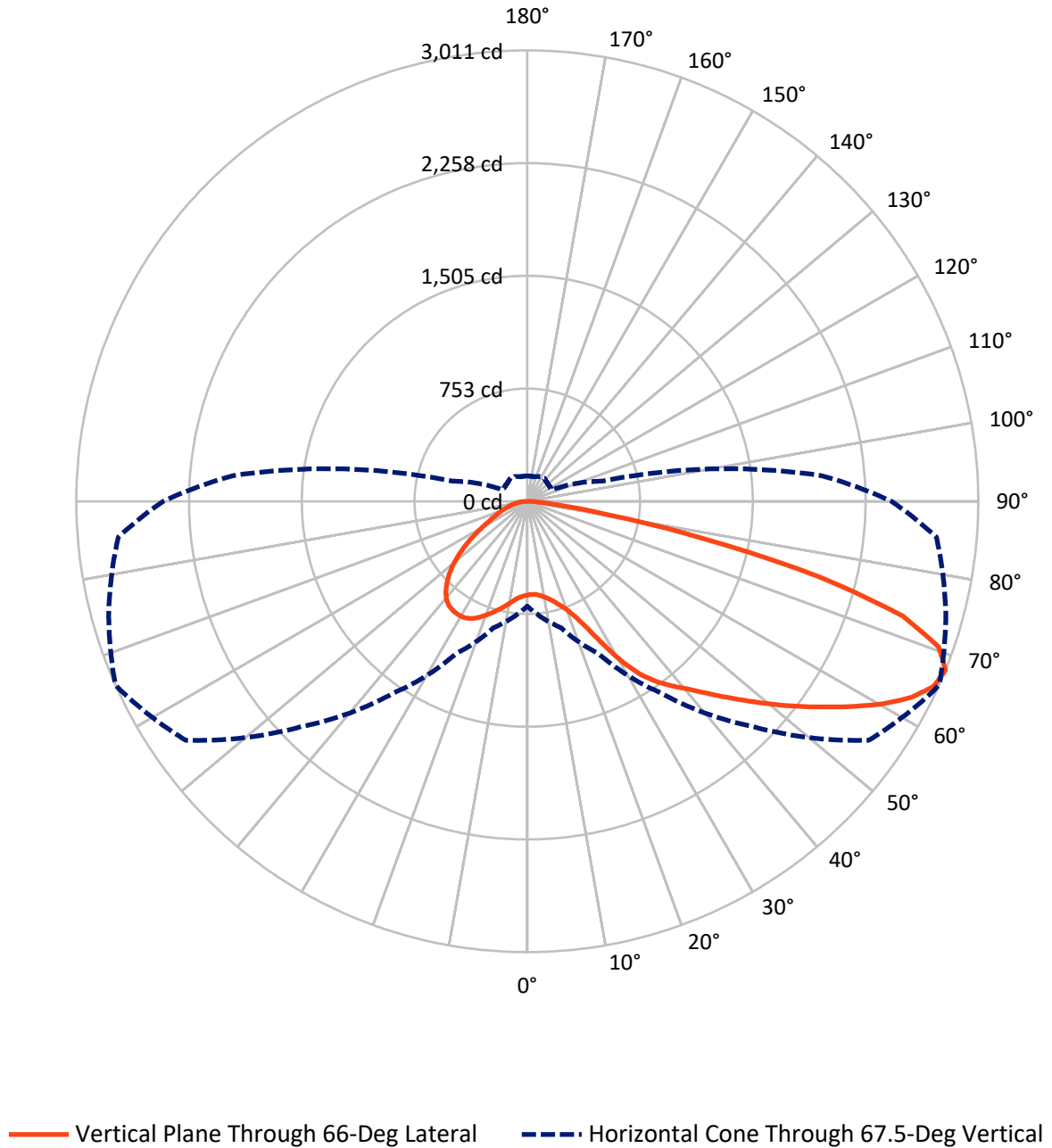
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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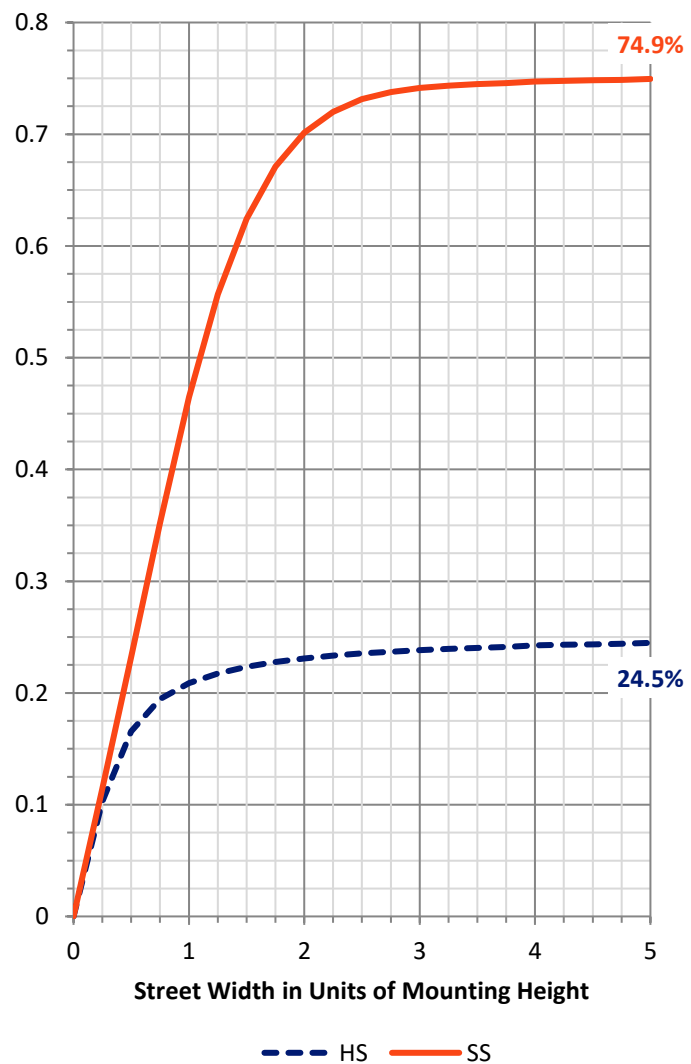
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1402.4	0.0	1402.4
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	4237.6	0.0	4237.6
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	5640.0	0.0	5640.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	1.1
10°-20°	204.9	3.6
20°-30°	394.9	7.0
30°-40°	692.5	12.3
40°-50°	1029.5	18.3
50°-60°	1305.0	23.1
60°-70°	1276.9	22.6
70°-80°	609.1	10.8
80°-90°	65.1	1.2
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°	5640.0	100.0
0°-180°	5640.0	100.0

**Coefficient of Utilization**

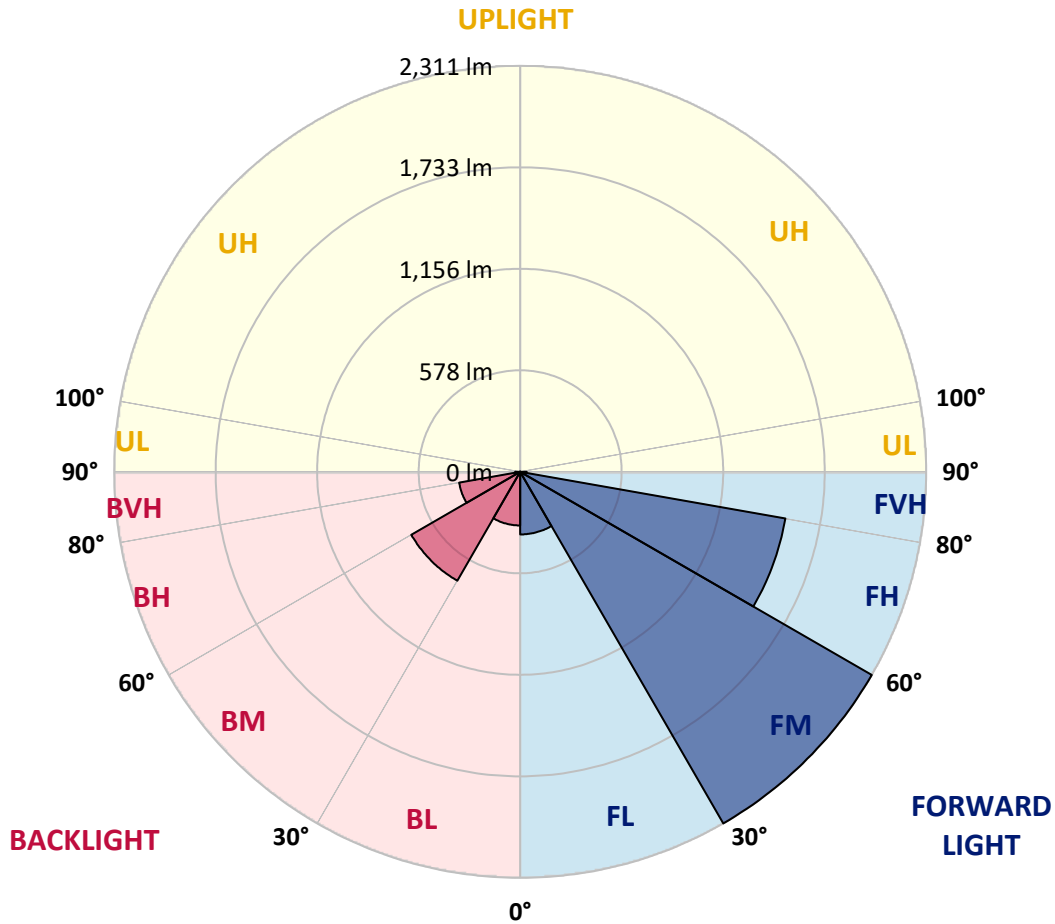


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	356.4	6.3			
FM (30°-60°)	2311.2	41.0			
FH (60°-80°)	1533.1	27.2			G1/1800
FVH (80°-90°)	36.9	0.7			G1/100
BL (0°-30°)	305.5	5.4	B1/500		
BM (30°-60°)	715.8	12.7	B1/1000		
BH (60°-80°)	352.9	6.3	B1/500		G1/500
BVH (80°-90°)	28.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	619.0	622.6	621.7	620.2	619.9	620.5	621.4	622.3	622.0	623.5	625.8
5°	617.3	620.8	620.5	620.5	621.7	624.1	625.6	627.0	625.6	627.3	630.6
7.5°	618.4	621.1	622.3	623.5	626.4	630.9	634.4	637.7	635.9	638.0	642.1
10°	633.6	635.6	636.8	636.8	638.9	643.9	647.5	653.4	651.9	655.2	660.5
12.5°	661.1	663.2	663.2	662.0	663.5	666.7	667.9	674.4	671.8	677.1	682.4
15°	694.9	699.0	695.8	693.7	694.3	697.6	697.3	702.3	699.6	704.1	708.8
17.5°	732.2	737.6	732.2	731.9	730.7	734.3	734.6	739.0	734.3	737.6	740.8
20°	776.4	783.8	779.3	780.8	778.2	779.6	781.1	787.6	780.2	782.6	781.7
22.5°	838.6	847.5	842.8	848.4	846.6	845.4	845.1	856.7	845.1	846.0	837.4
25°	929.3	940.0	931.7	939.4	939.4	943.2	947.7	962.5	943.2	937.6	915.4
27.5°	1063.2	1073.9	1057.6	1062.3	1060.9	1070.3	1065.6	1102.3	1081.6	1072.4	1027.7
30°	1224.4	1243.4	1212.6	1211.4	1209.9	1225.0	1231.8	1256.1	1235.1	1225.9	1172.0
32.5°	1398.7	1418.5	1381.8	1371.1	1365.5	1374.7	1369.0	1388.6	1374.1	1359.9	1293.2
35°	1583.0	1602.5	1567.6	1546.8	1524.3	1505.1	1484.9	1489.9	1476.3	1454.7	1385.6
37.5°	1757.2	1793.1	1756.0	1733.8	1692.3	1654.7	1598.4	1575.0	1562.2	1542.4	1472.8
40°	1934.7	1955.2	1927.0	1908.1	1863.0	1804.1	1714.0	1664.5	1647.3	1628.0	1569.1
42.5°	2065.4	2085.0	2069.9	2056.8	2021.6	1953.1	1836.6	1774.7	1749.8	1728.2	1678.1
45°	2169.1	2183.6	2174.2	2178.9	2163.8	2097.4	1963.8	1892.9	1867.2	1840.8	1801.4
47.5°	2210.9	2226.3	2241.4	2269.6	2295.4	2246.5	2100.4	2021.0	1993.7	1966.7	1927.9
50°	2206.2	2221.9	2265.7	2325.6	2405.6	2389.3	2244.4	2157.3	2132.1	2101.3	2065.4
52.5°	2168.2	2186.0	2242.3	2341.9	2469.3	2496.3	2391.1	2298.0	2274.3	2237.6	2201.7
55°	2068.7	2079.3	2163.8	2304.8	2484.4	2571.0	2534.8	2448.0	2424.3	2373.0	2333.9
57.5°	1884.1	1899.5	2022.4	2205.0	2446.5	2621.6	2661.0	2605.6	2582.8	2509.0	2468.1
60°	1643.1	1667.7	1808.5	2037.3	2349.9	2621.3	2775.7	2760.6	2741.6	2643.0	2600.3
62.5°	1370.5	1399.0	1534.4	1800.2	2181.0	2546.9	2847.4	2890.4	2880.6	2766.5	2712.0
65°	1052.6	1072.1	1206.9	1493.5	1918.1	2387.2	2855.7	2979.0	2980.8	2860.5	2770.4
67.5°	700.8	757.1	874.2	1120.7	1566.1	2126.2	2782.8	2993.5	3010.7	2892.8	2741.0
70°	342.0	416.0	530.7	728.4	1120.7	1725.8	2592.3	2874.4	2912.6	2798.5	2566.2
72.5°	141.9	165.9	228.5	359.4	643.3	1164.6	2209.4	2551.4	2622.2	2479.7	2157.6
75°	95.7	103.7	130.7	184.3	293.1	574.3	1593.4	1902.4	2016.5	1872.8	1530.8
77.5°	73.8	78.8	95.1	128.9	174.2	217.2	852.8	1146.5	1205.5	1116.0	796.5
80°	58.1	61.9	71.1	93.9	123.6	116.2	290.7	519.5	553.5	464.3	256.0
82.5°	50.4	51.9	51.0	63.7	82.1	67.9	95.4	191.7	211.6	153.5	83.6
85°	36.4	40.6	42.4	39.4	43.6	34.4	39.1	67.9	74.7	66.7	47.1
87.5°	14.8	21.9	27.0	25.5	16.0	9.8	12.1	19.9	22.8	24.9	15.4
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°	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6	625.6
2.5°	626.1	628.2	629.7	631.5	632.7	634.4	638.0	640.1	640.4	641.8	641.6
5°	631.8	634.7	638.0	642.7	648.1	652.5	659.3	664.1	665.9	667.3	667.0
7.5°	643.9	648.1	654.0	662.3	670.0	675.9	684.2	689.9	695.5	697.6	697.9
10°	662.0	667.9	676.5	687.8	696.1	703.8	712.4	717.1	722.7	725.1	726.3
12.5°	684.5	690.7	702.0	717.7	725.4	730.7	733.7	732.5	733.7	735.8	736.4
15°	710.3	717.1	729.9	746.7	752.1	747.3	740.8	734.9	734.0	734.6	736.7
17.5°	740.8	745.9	760.7	774.9	771.0	751.5	737.3	727.8	723.0	721.6	723.6
20°	783.5	783.5	795.6	804.5	778.8	745.6	723.3	707.9	698.2	694.0	693.1
22.5°	835.4	830.6	838.3	832.1	777.3	729.0	698.2	671.5	656.7	650.7	649.8
25°	901.1	895.5	893.4	854.9	766.6	702.6	652.5	620.2	607.2	603.9	604.5
27.5°	1000.4	986.2	959.2	867.4	747.0	661.1	599.2	569.2	561.8	562.1	563.0
30°	1132.6	1104.1	1038.0	869.4	715.0	602.4	544.7	523.3	519.8	521.2	526.3
32.5°	1255.0	1228.0	1118.6	859.9	665.9	544.9	495.8	481.5	476.2	478.0	480.3
35°	1351.0	1343.6	1193.3	846.6	605.4	491.0	451.9	439.8	429.4	427.0	428.8
37.5°	1441.6	1438.7	1249.3	827.9	545.5	452.8	416.6	400.6	385.5	377.2	377.5
40°	1541.2	1538.2	1286.1	799.2	492.5	419.6	384.9	363.9	345.2	330.1	331.6
42.5°	1653.2	1635.7	1303.6	758.0	447.5	391.5	359.2	330.7	306.1	292.2	293.1
45°	1775.6	1736.2	1303.3	705.6	409.5	365.7	331.6	291.3	268.5	255.4	254.8
47.5°	1905.4	1832.2	1287.3	647.5	372.8	337.2	288.9	258.1	243.0	235.0	233.2
50°	2039.3	1922.0	1260.0	580.8	335.1	304.9	262.3	241.2	229.7	222.2	219.6
52.5°	2165.3	2003.5	1227.1	505.2	296.9	273.5	250.4	234.1	222.0	213.7	210.1
55°	2282.3	2073.7	1180.6	427.9	265.8	252.5	244.8	231.1	217.2	207.4	203.6
57.5°	2386.3	2119.3	1100.3	355.3	243.6	238.0	238.8	226.1	210.1	201.8	196.5
60°	2472.9	2152.8	981.4	288.0	225.5	223.7	229.7	216.6	197.9	188.5	184.3
62.5°	2524.7	2152.2	835.6	235.9	210.1	210.7	217.5	204.8	185.8	176.9	174.2
65°	2520.3	2099.5	675.6	201.8	195.3	195.9	204.8	191.7	175.7	170.4	170.1
67.5°	2431.1	1970.9	518.3	179.6	179.0	181.6	192.0	182.8	169.5	168.9	169.8
70°	2189.6	1703.9	373.4	161.8	162.1	165.9	179.6	177.2	166.2	167.4	167.1
72.5°	1755.7	1299.1	250.7	143.1	143.4	149.6	167.7	172.8	163.0	178.7	181.1
75°	1169.3	810.2	161.2	123.3	123.6	131.6	157.4	164.2	154.1	178.1	179.6
77.5°	561.8	364.2	116.8	103.7	103.7	111.1	136.0	147.0	131.3	138.4	126.8
80°	194.1	136.9	91.9	83.6	81.8	86.8	114.7	127.4	113.2	104.3	97.8
82.5°	76.5	71.1	73.8	64.9	59.0	62.2	89.2	105.2	83.3	75.3	75.0
85°	43.9	46.2	52.2	43.0	34.1	38.2	65.5	75.6	62.8	55.4	56.6
87.5°	11.9	16.3	24.0	22.2	15.4	16.3	31.1	41.8	36.2	27.9	28.7
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)