

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: P881564

Luminaire Tested: **NAV-SB1A-740-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-740-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

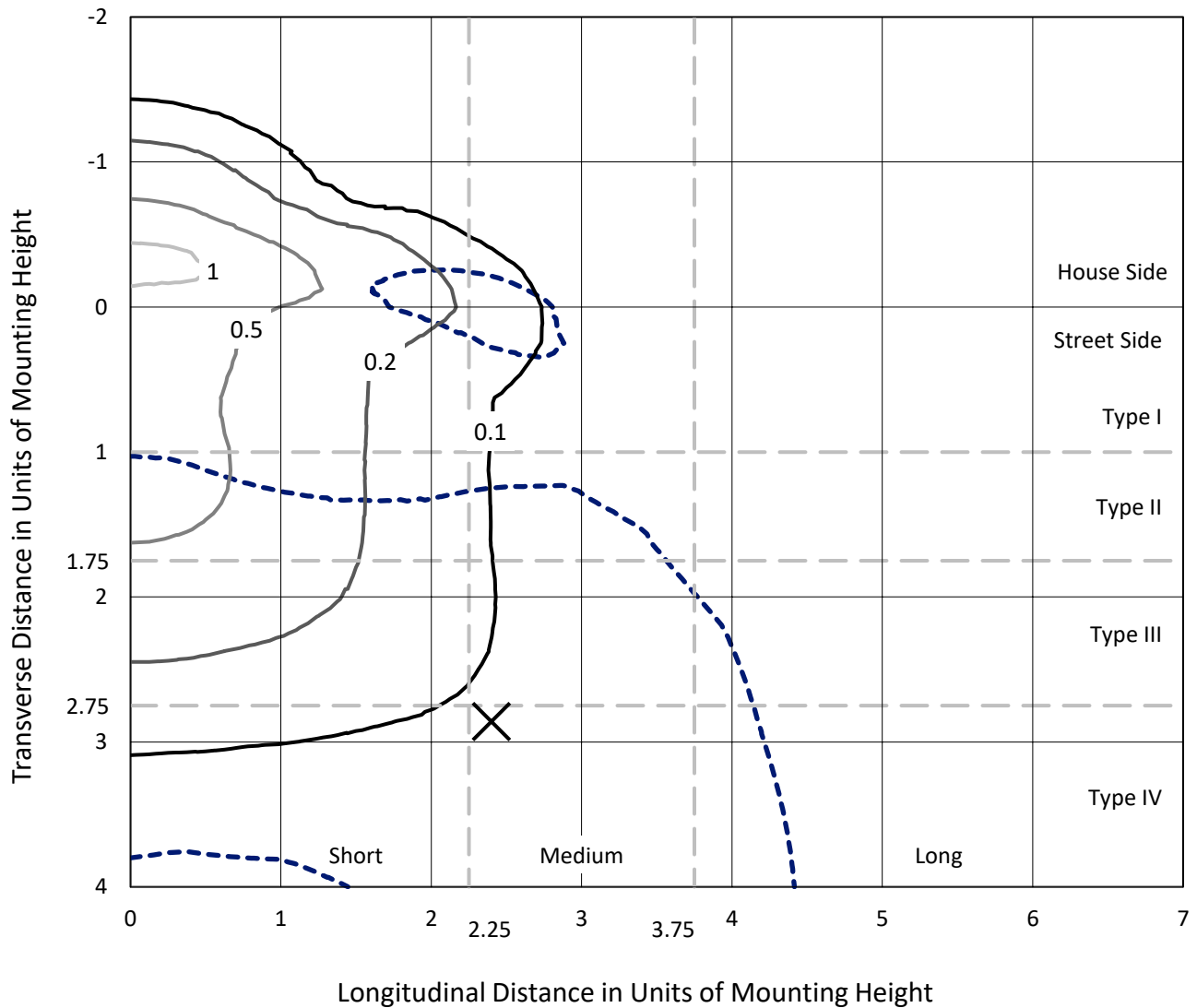
Lumens per Lamp: N/A  
Luminaire Lumens: 4798 lumens  
Efficiency: N/A  
Efficacy: 155.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
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

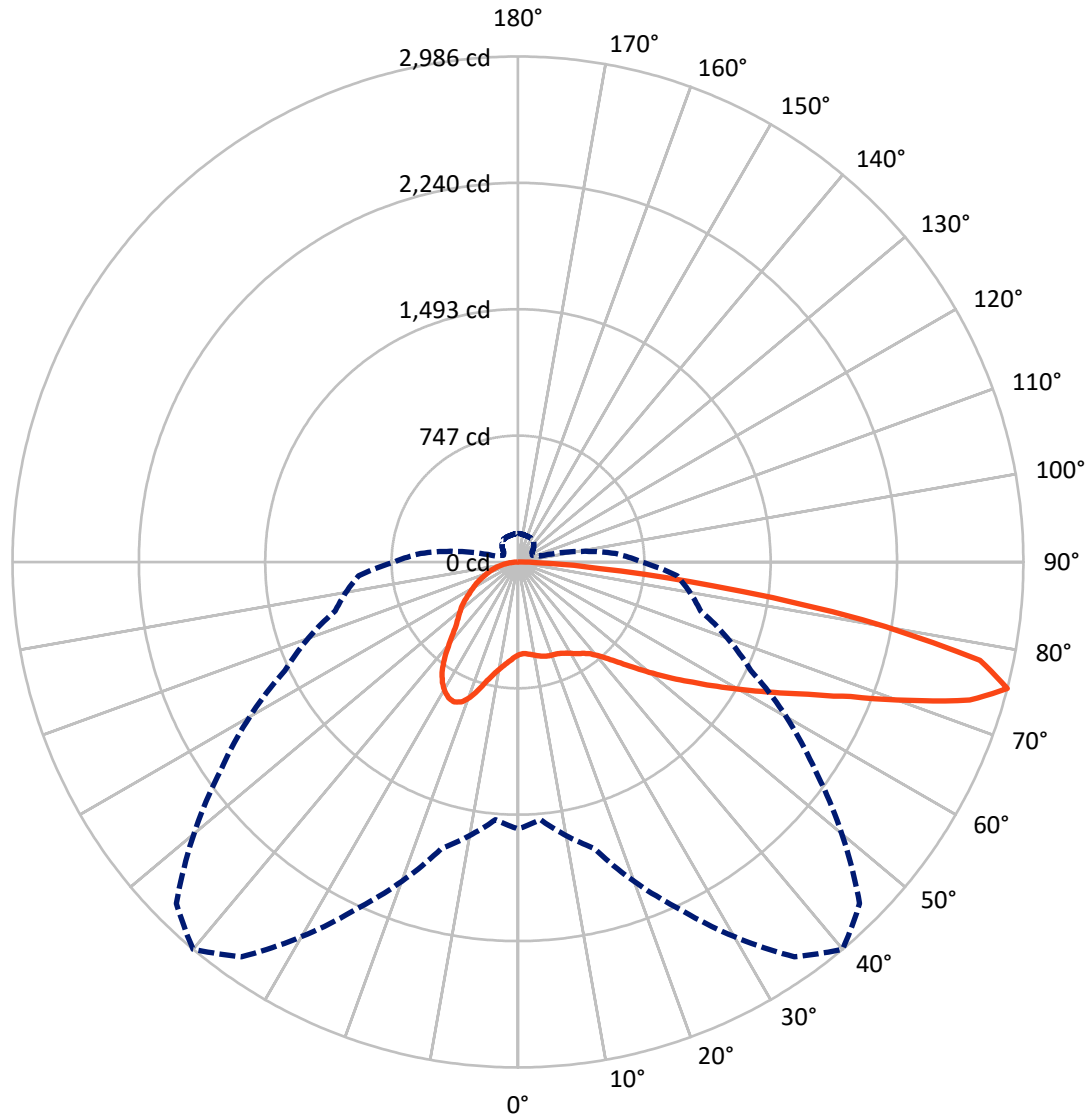
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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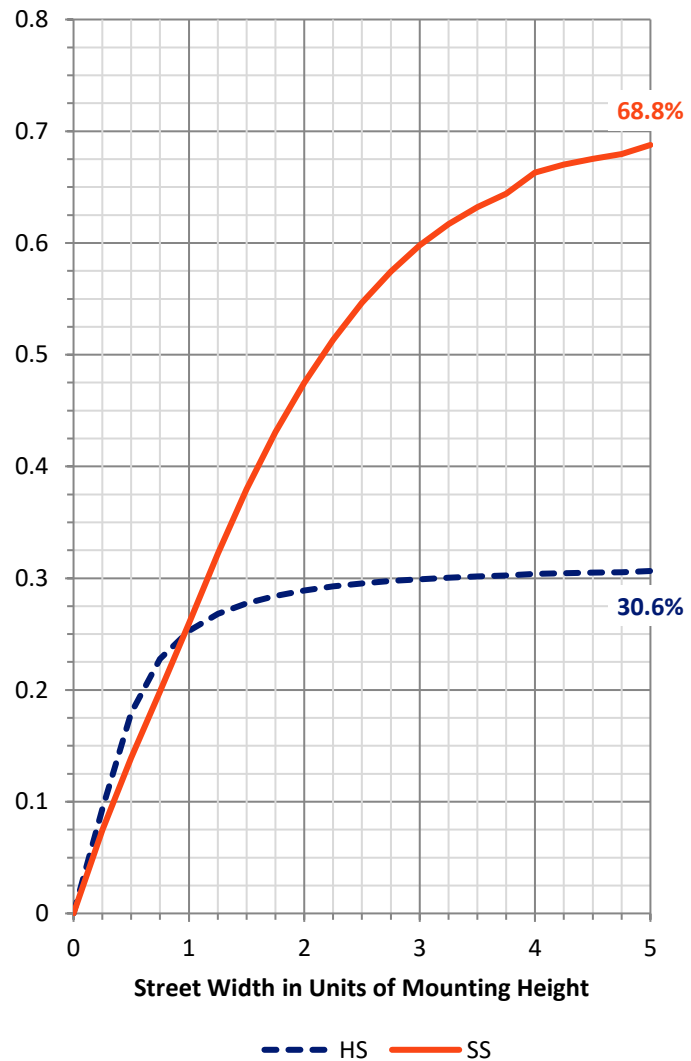
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1486.6	0.0	1486.6
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	3311.4	0.0	3311.4
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	4798.0	0.0	4798.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.8	1.1
10°-20°	183.9	3.8
20°-30°	335.7	7.0
30°-40°	476.2	9.9
40°-50°	643.0	13.4
50°-60°	865.0	18.0
60°-70°	1097.9	22.9
70°-80°	996.4	20.8
80°-90°	145.2	3.0
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°	4798.0	100.0
0°-180°	4798.0	100.0

**Coefficient of Utilization**



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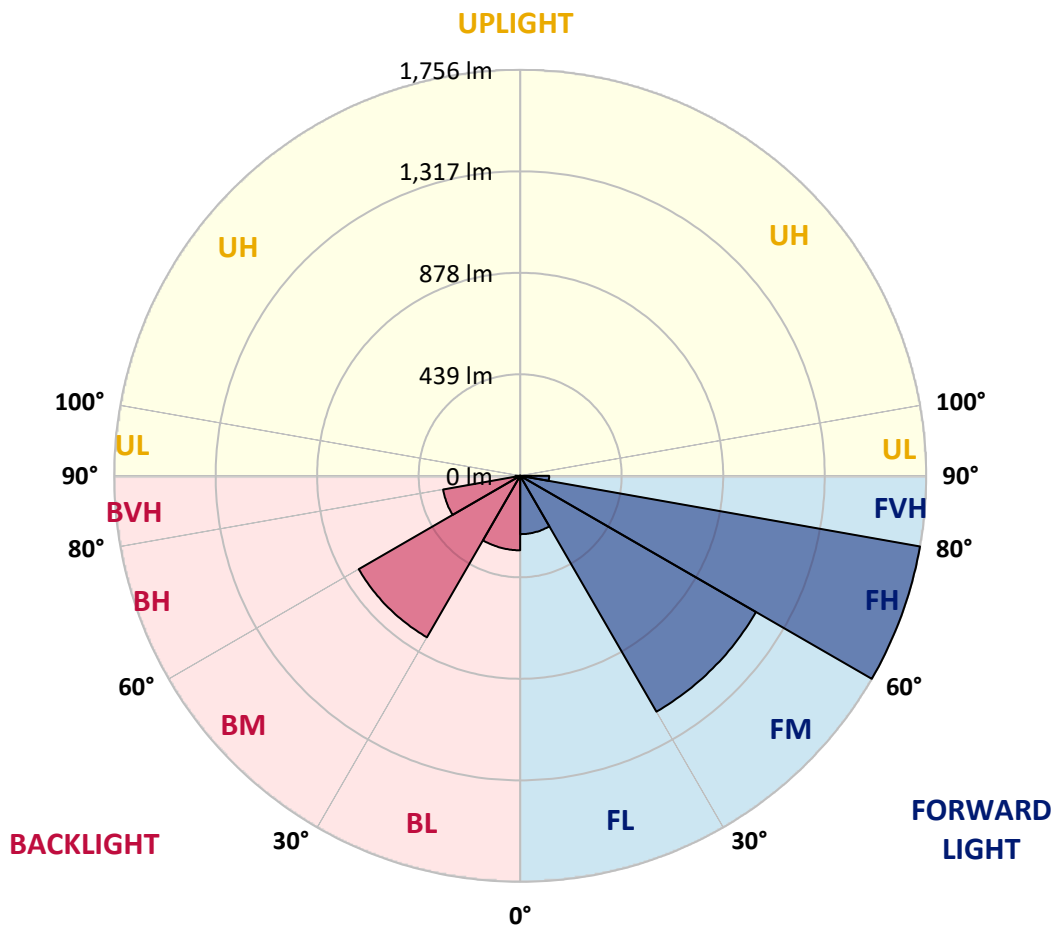
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	252.4	5.3			
FM (30°-60°)	1177.8	24.5			
FH (60°-80°)	1756.0	36.6			G1/1800
FVH (80°-90°)	125.2	2.6			G2/225
BL (0°-30°)	322.0	6.7	B1/500		
BM (30°-60°)	806.3	16.8	B1/1000		
BH (60°-80°)	338.2	7.0	B1/500		G1/500
BVH (80°-90°)	20.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7
2.5°	540.3	543.3	542.6	541.5	541.5	541.8	541.5	543.3	545.1	546.9	549.7
5°	545.9	548.9	547.4	546.1	545.1	544.8	544.1	543.8	544.8	547.1	550.9
7.5°	556.8	559.9	557.6	555.3	553.2	552.2	551.2	549.7	548.9	550.2	555.5
10°	569.0	572.1	569.3	565.2	561.9	560.6	559.6	558.1	557.1	557.8	563.7
12.5°	581.2	584.3	580.5	574.9	570.5	569.8	568.5	568.0	567.7	567.5	573.3
15°	592.7	595.2	590.4	583.8	579.2	577.9	576.7	577.4	578.7	580.2	586.8
17.5°	601.6	604.1	597.0	588.4	584.0	583.5	582.8	585.3	588.9	592.7	600.8
20°	609.7	612.3	603.1	591.4	586.3	586.3	586.6	591.9	597.0	602.6	613.8
22.5°	621.2	623.2	612.0	596.0	588.6	589.1	591.2	596.5	602.9	610.5	626.0
25°	638.2	639.8	626.0	604.6	596.2	597.8	599.6	602.1	608.2	617.1	638.0
27.5°	665.7	667.0	648.9	619.9	607.2	609.7	612.3	610.5	613.3	620.9	647.7
30°	704.4	705.2	682.3	643.8	625.8	627.0	627.5	620.2	614.8	620.9	654.5
32.5°	750.2	750.0	722.7	672.8	646.9	645.6	641.3	626.8	614.3	619.7	660.6
35°	821.2	818.4	783.3	713.6	670.8	662.9	652.7	634.2	616.9	618.4	666.0
37.5°	938.8	930.1	881.5	780.2	706.4	686.3	671.3	646.1	622.5	617.9	672.3
40°	1071.4	1060.4	1007.0	871.6	759.9	727.6	703.4	663.2	631.6	620.2	681.8
42.5°	1228.6	1213.1	1155.6	979.2	827.6	780.7	744.4	684.8	645.1	627.5	694.5
45°	1421.8	1401.2	1319.7	1100.6	912.8	850.5	801.9	717.6	665.7	641.8	713.6
47.5°	1617.0	1622.1	1506.3	1239.6	1015.1	936.5	873.9	767.0	695.7	664.7	744.4
50°	1824.4	1827.9	1691.8	1393.5	1131.2	1033.7	954.8	822.2	737.5	697.3	790.4
52.5°	1986.2	1986.7	1860.2	1554.6	1252.0	1140.6	1042.1	885.3	785.8	740.5	851.7
55°	2087.5	2086.2	1978.3	1707.0	1391.0	1252.8	1138.8	957.1	844.9	791.4	928.8
57.5°	2161.0	2157.2	2059.8	1838.1	1539.1	1385.4	1248.2	1038.5	914.6	852.0	1030.4
60°	2189.0	2186.7	2115.0	1951.3	1694.8	1532.0	1374.4	1129.6	993.7	923.5	1160.9
62.5°	2199.7	2204.0	2169.2	2061.0	1861.5	1694.3	1513.1	1238.6	1082.8	1004.4	1298.6
65°	2237.4	2245.3	2238.1	2204.6	2049.8	1884.4	1697.1	1368.1	1180.0	1091.2	1442.4
67.5°	2311.9	2319.8	2322.9	2376.3	2279.9	2121.3	1926.7	1529.4	1293.8	1181.3	1550.5
70°	2310.2	2307.9	2361.8	2513.0	2568.0	2449.4	2236.1	1727.9	1429.4	1256.1	1564.3
72.5°	2102.8	2084.4	2211.9	2511.5	2807.7	2791.9	2614.0	1983.9	1546.5	1265.3	1357.4
75°	1577.5	1528.7	1753.9	2263.3	2847.6	2986.3	2854.2	2142.7	1518.7	1117.9	944.6
77.5°	674.6	625.5	890.9	1675.5	2548.6	2791.6	2633.9	1869.4	1212.3	739.3	463.9
80°	176.6	176.4	269.2	759.6	1733.3	2061.5	1808.6	1207.3	692.7	264.1	128.0
82.5°	73.0	71.3	99.0	295.5	846.9	1156.9	944.1	538.5	250.2	71.5	42.5
85°	27.2	27.0	48.1	102.0	298.8	477.1	345.3	137.7	62.3	34.9	19.1
87.5°	7.6	7.4	10.4	35.4	72.8	110.4	59.0	22.6	17.6	13.7	5.6
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°	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7
2.5°	550.4	551.7	554.0	555.8	558.1	560.6	564.2	566.5	568.8	570.3	569.3
5°	552.7	555.5	561.4	567.2	574.1	580.5	587.8	593.2	597.5	598.8	599.3
7.5°	557.8	562.4	572.3	582.2	593.2	603.6	614.3	623.5	630.9	633.7	633.9
10°	566.7	572.8	586.8	600.8	615.3	631.4	645.1	658.3	668.8	673.1	673.4
12.5°	577.9	585.6	603.9	623.2	643.3	665.5	683.3	699.6	712.5	718.4	718.4
15°	592.4	602.4	625.8	651.7	681.2	712.0	734.7	752.8	767.3	774.4	773.9
17.5°	608.2	621.4	651.0	690.1	732.4	772.9	799.3	812.6	827.6	834.4	834.2
20°	623.5	639.8	682.0	739.0	795.2	838.3	859.6	863.2	864.2	865.0	867.0
22.5°	639.3	661.1	720.9	800.6	860.9	890.7	893.7	878.5	857.1	847.2	850.0
25°	656.6	685.6	771.8	868.5	917.4	921.0	897.5	860.4	819.9	801.4	804.2
27.5°	673.4	713.8	832.9	933.4	958.1	926.8	876.4	823.7	774.9	755.3	757.6
30°	690.1	746.1	900.3	990.2	976.7	912.3	843.1	784.3	735.2	714.6	716.9
32.5°	707.2	783.8	978.0	1031.2	973.4	881.5	801.6	740.0	696.8	675.1	677.9
35°	726.5	830.1	1051.5	1053.5	951.2	836.2	746.9	687.1	649.4	632.1	635.9
37.5°	751.7	888.9	1116.4	1059.1	912.6	769.8	679.0	624.5	593.4	585.6	591.2
40°	783.0	959.6	1166.0	1050.2	855.3	689.1	604.6	561.1	543.6	545.3	551.5
42.5°	823.7	1038.8	1200.9	1027.3	775.7	605.9	539.5	520.2	528.6	535.7	542.3
45°	876.7	1121.0	1222.5	988.4	685.6	535.4	501.1	505.7	512.0	512.8	517.9
47.5°	944.4	1204.2	1236.8	929.6	593.7	485.8	476.6	477.7	476.4	471.0	475.1
50°	1028.9	1285.1	1249.5	851.7	515.6	454.8	442.5	439.0	421.4	404.1	406.4
52.5°	1125.1	1359.4	1254.8	755.0	454.8	428.8	408.9	386.6	353.7	348.4	350.2
55°	1231.9	1428.1	1241.1	636.2	403.6	395.5	365.4	338.5	334.9	330.3	331.1
57.5°	1359.7	1502.2	1213.1	503.6	351.2	356.5	327.3	330.3	324.0	316.8	315.6
60°	1499.4	1578.8	1164.0	382.7	297.0	307.9	317.3	317.1	315.3	309.4	307.4
62.5°	1625.1	1629.2	1067.3	293.2	249.4	270.3	296.0	295.7	294.2	290.9	289.6
65°	1699.9	1621.5	905.9	230.8	210.2	239.2	266.9	269.0	269.2	269.0	269.0
67.5°	1686.7	1532.2	684.5	183.7	177.9	207.7	238.2	241.0	243.0	243.5	244.0
70°	1537.1	1336.0	446.4	146.6	149.1	179.9	211.0	213.8	215.5	217.6	218.6
72.5°	1198.1	982.3	255.5	118.6	123.9	156.0	184.0	187.3	188.3	192.1	193.7
75°	730.1	577.7	137.9	93.4	101.8	133.3	157.3	161.1	162.9	167.4	168.0
77.5°	347.1	250.2	78.6	72.8	81.9	108.9	132.8	137.2	132.3	134.9	132.8
80°	117.3	92.9	49.6	55.5	62.6	85.0	106.4	110.7	100.5	100.0	99.0
82.5°	41.0	37.7	31.6	36.9	40.5	60.8	80.4	86.0	74.8	74.6	71.0
85°	16.0	15.3	17.6	20.1	24.2	37.4	52.9	55.7	46.1	37.2	36.6
87.5°	3.3	3.6	4.3	4.6	7.4	13.0	19.1	23.4	18.6	15.8	14.5
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)