

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: P881789

Luminaire Tested: **NAV-SB1B-835-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881789  
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-835-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

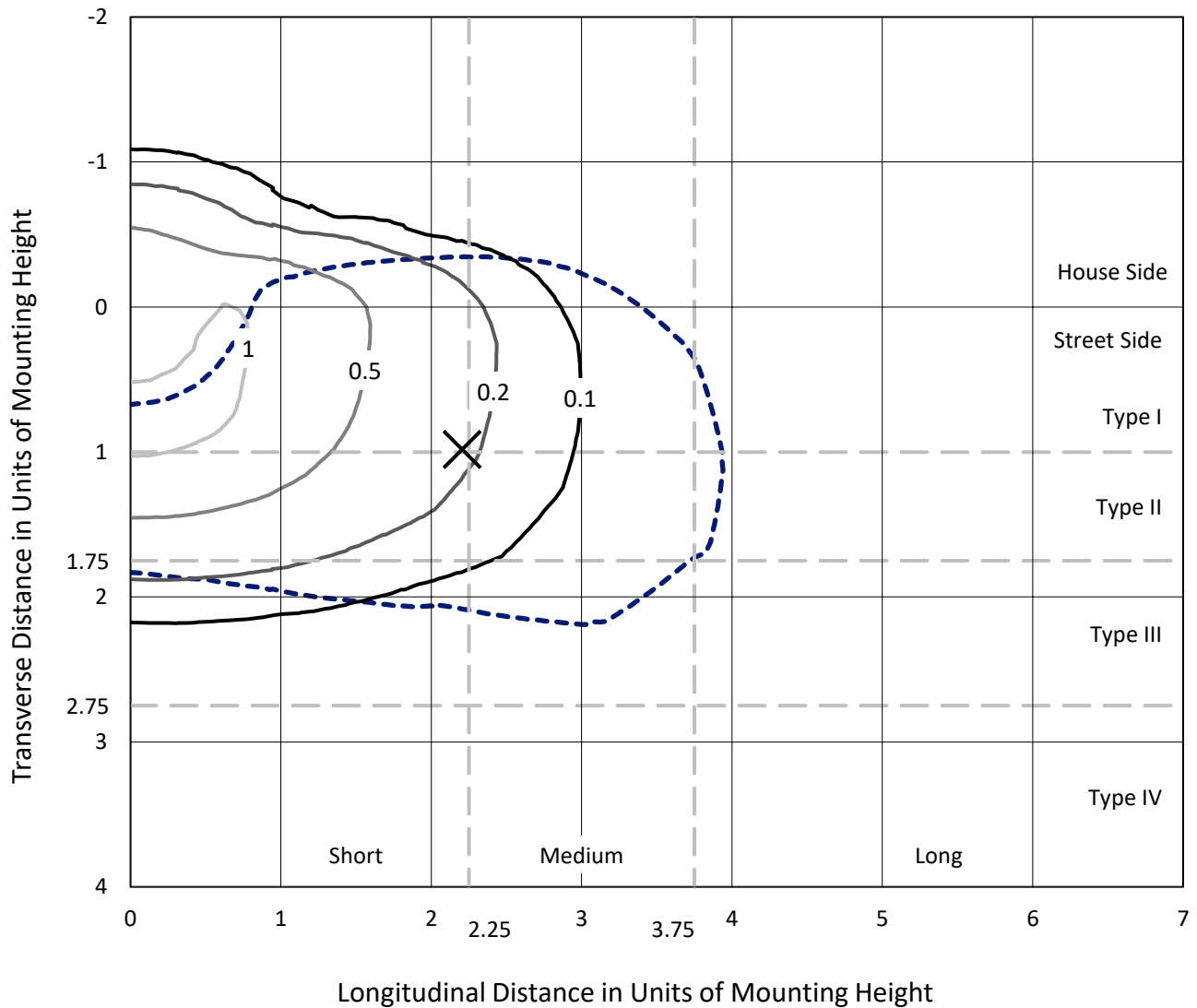
Lumens per Lamp: N/A  
Luminaire Lumens: 4758 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 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

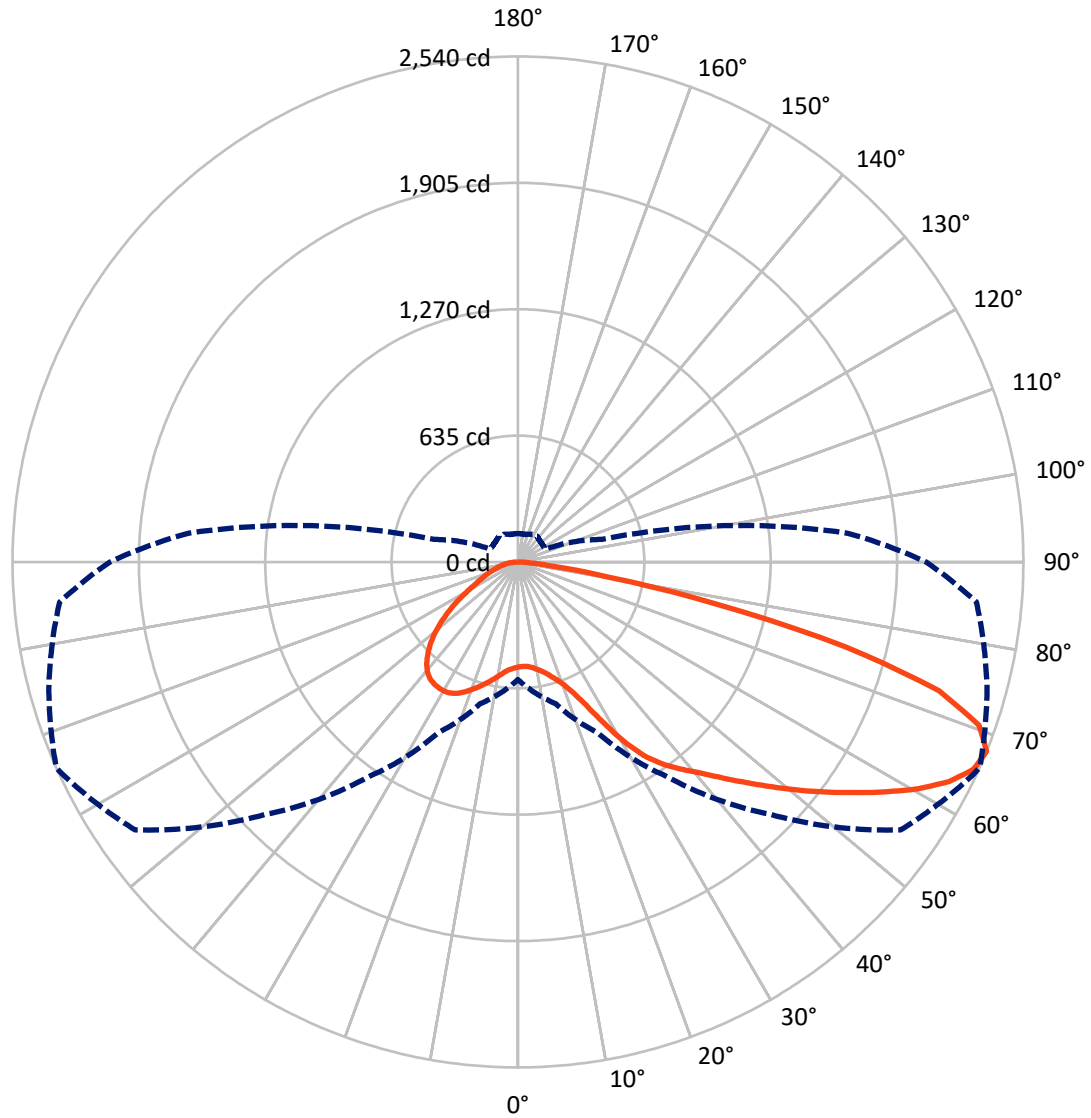
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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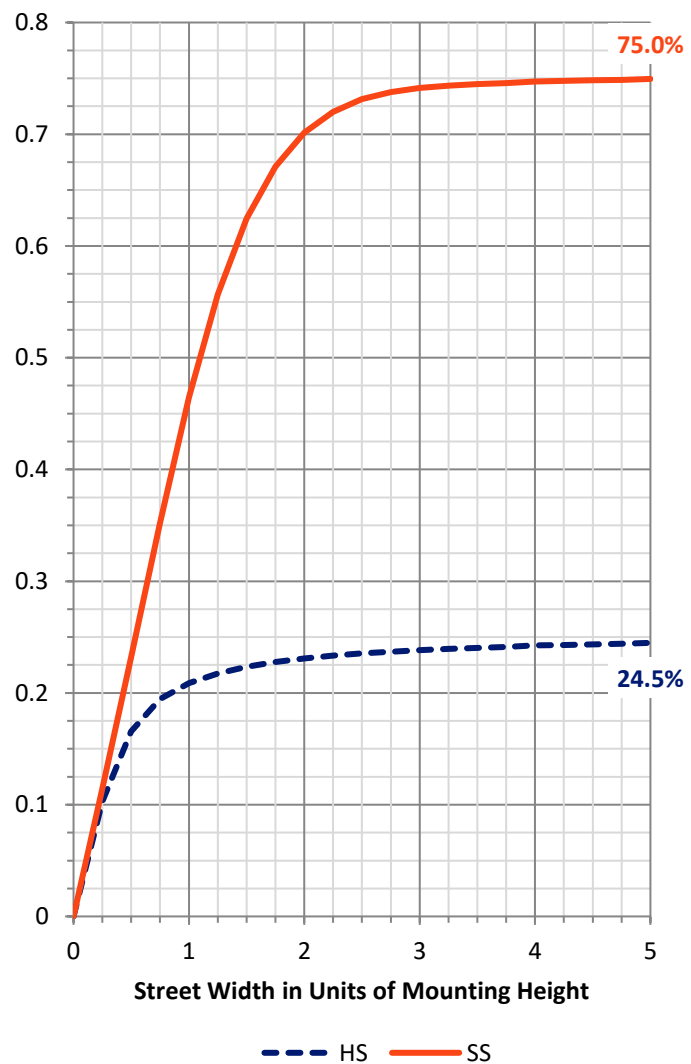
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1183.0	0.0	1183.0
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	3574.9	0.0	3574.9
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	4758.0	0.0	4758.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.3	1.1
10°-20°	172.9	3.6
20°-30°	333.2	7.0
30°-40°	584.2	12.3
40°-50°	868.5	18.3
50°-60°	1100.9	23.1
60°-70°	1077.2	22.6
70°-80°	513.8	10.8
80°-90°	54.9	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°	4758.0	100.0
0°-180°	4758.0	100.0

**Coefficient of Utilization**



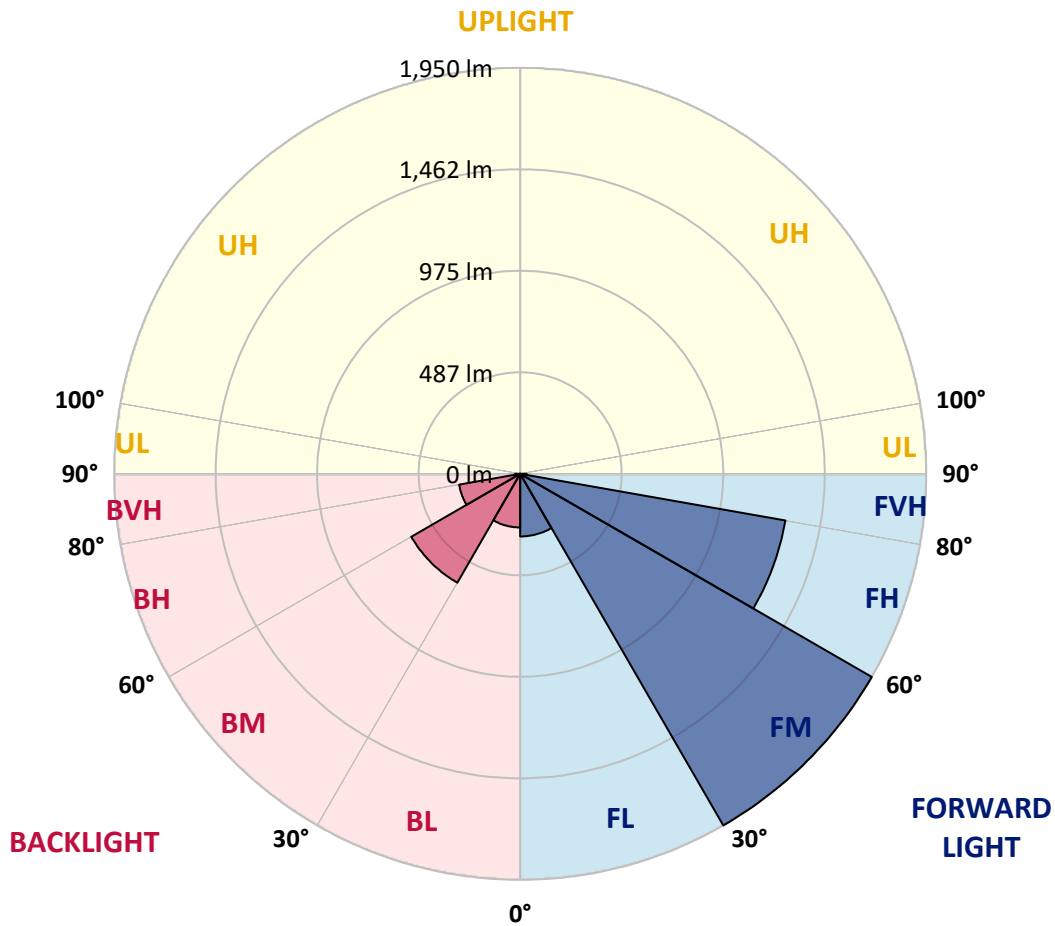
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	300.7	6.3			
FM (30°-60°)	1949.8	41.0			
FH (60°-80°)	1293.3	27.2			G1/1800
FVH (80°-90°)	31.1	0.7			G1/100
BL (0°-30°)	257.7	5.4	B1/500		
BM (30°-60°)	603.8	12.7	B1/1000		
BH (60°-80°)	297.7	6.3	B1/500		G1/500
BVH (80°-90°)	23.8	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°	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7
2.5°	522.2	525.2	524.5	523.2	523.0	523.5	524.2	525.0	524.7	526.0	528.0
5°	520.7	523.7	523.5	523.5	524.5	526.5	527.7	529.0	527.7	529.2	532.0
7.5°	521.7	524.0	525.0	526.0	528.5	532.2	535.2	538.0	536.5	538.2	541.7
10°	534.5	536.2	537.2	537.2	539.0	543.2	546.2	551.2	550.0	552.7	557.2
12.5°	557.7	559.5	559.5	558.5	559.7	562.5	563.5	569.0	566.7	571.2	575.7
15°	586.2	589.7	587.0	585.2	585.7	588.5	588.2	592.5	590.2	594.0	598.0
17.5°	617.7	622.2	617.7	617.5	616.5	619.5	619.7	623.5	619.5	622.2	625.0
20°	655.0	661.2	657.5	658.7	656.5	657.7	659.0	664.5	658.2	660.2	659.5
22.5°	707.5	715.0	711.0	715.7	714.2	713.2	713.0	722.7	713.0	713.7	706.5
25°	784.0	793.0	786.0	792.5	792.5	795.7	799.5	812.0	795.7	791.0	772.2
27.5°	897.0	906.0	892.2	896.2	895.0	903.0	899.0	930.0	912.5	904.7	867.0
30°	1033.0	1049.0	1023.0	1022.0	1020.7	1033.5	1039.2	1059.7	1042.0	1034.2	988.7
32.5°	1179.9	1196.7	1165.7	1156.7	1151.9	1159.7	1154.9	1171.4	1159.2	1147.2	1090.9
35°	1335.4	1351.9	1322.4	1304.9	1285.9	1269.7	1252.7	1256.9	1245.4	1227.2	1168.9
37.5°	1482.4	1512.7	1481.4	1462.7	1427.7	1395.9	1348.4	1328.7	1317.9	1301.2	1242.4
40°	1632.2	1649.4	1625.7	1609.7	1571.7	1521.9	1445.9	1404.2	1389.7	1373.4	1323.7
42.5°	1742.4	1758.9	1746.2	1735.2	1705.4	1647.7	1549.4	1497.2	1476.2	1457.9	1415.7
45°	1829.9	1842.2	1834.2	1838.2	1825.4	1769.4	1656.7	1596.9	1575.2	1552.9	1519.7
47.5°	1865.2	1878.2	1890.9	1914.7	1936.4	1895.2	1771.9	1704.9	1681.9	1659.2	1626.4
50°	1861.2	1874.4	1911.4	1961.9	2029.4	2015.7	1893.4	1819.9	1798.7	1772.7	1742.4
52.5°	1829.2	1844.2	1891.7	1975.7	2083.2	2105.9	2017.2	1938.7	1918.7	1887.7	1857.4
55°	1745.2	1754.2	1825.4	1944.4	2095.9	2168.9	2138.4	2065.2	2045.2	2001.9	1968.9
57.5°	1589.4	1602.4	1706.2	1860.2	2063.9	2211.6	2244.9	2198.1	2178.9	2116.7	2082.2
60°	1386.2	1406.9	1525.7	1718.7	1982.4	2211.4	2341.6	2328.9	2312.9	2229.6	2193.6
62.5°	1156.2	1180.2	1294.4	1518.7	1839.9	2148.6	2402.1	2438.4	2430.1	2333.9	2287.9
65°	888.0	904.5	1018.2	1259.9	1618.2	2013.9	2409.1	2513.1	2514.6	2413.1	2337.1
67.5°	591.2	638.7	737.5	945.5	1321.2	1793.7	2347.6	2525.4	2539.9	2440.4	2312.4
70°	288.5	351.0	447.7	614.5	945.5	1455.9	2186.9	2424.9	2457.1	2360.9	2164.9
72.5°	119.7	140.0	192.7	303.2	542.7	982.5	1863.9	2152.4	2212.1	2091.9	1820.2
75°	80.7	87.5	110.2	155.5	247.2	484.5	1344.2	1604.9	1701.2	1579.9	1291.4
77.5°	62.2	66.5	80.2	108.7	147.0	183.2	719.5	967.2	1017.0	941.5	672.0
80°	49.0	52.2	60.0	79.2	104.2	98.0	245.2	438.2	467.0	391.7	216.0
82.5°	42.5	43.7	43.0	53.7	69.2	57.2	80.5	161.7	178.5	129.5	70.5
85°	30.7	34.2	35.7	33.2	36.7	29.0	33.0	57.2	63.0	56.2	39.7
87.5°	12.5	18.5	22.7	21.5	13.5	8.2	10.2	16.7	19.2	21.0	13.0
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°	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7	527.7
2.5°	528.2	530.0	531.2	532.7	533.7	535.2	538.2	540.0	540.2	541.5	541.2
5°	533.0	535.5	538.2	542.2	546.7	550.5	556.2	560.2	561.7	563.0	562.7
7.5°	543.2	546.7	551.7	558.7	565.2	570.2	577.2	582.0	586.7	588.5	588.7
10°	558.5	563.5	570.7	580.2	587.2	593.7	601.0	605.0	609.7	611.7	612.7
12.5°	577.5	582.7	592.2	605.5	612.0	616.5	619.0	618.0	619.0	620.7	621.2
15°	599.2	605.0	615.7	630.0	634.5	630.5	625.0	620.0	619.2	619.7	621.5
17.5°	625.0	629.2	641.7	653.7	650.5	634.0	622.0	614.0	610.0	608.7	610.5
20°	661.0	661.0	671.2	678.7	657.0	629.0	610.2	597.2	589.0	585.5	584.7
22.5°	704.7	700.7	707.2	702.0	655.7	615.0	589.0	566.5	554.0	549.0	548.2
25°	760.2	755.5	753.7	721.2	646.7	592.7	550.5	523.2	512.2	509.5	510.0
27.5°	844.0	832.0	809.2	731.7	630.2	557.7	505.5	480.2	474.0	474.2	475.0
30°	955.5	931.5	875.7	733.5	603.2	508.2	459.5	441.5	438.5	439.7	444.0
32.5°	1058.7	1036.0	943.7	725.5	561.7	459.7	418.2	406.2	401.7	403.2	405.2
35°	1139.7	1133.4	1006.7	714.2	510.7	414.2	381.2	371.0	362.2	360.2	361.7
37.5°	1216.2	1213.7	1054.0	698.5	460.2	382.0	351.5	338.0	325.2	318.2	318.5
40°	1300.2	1297.7	1084.9	674.2	415.5	354.0	324.7	307.0	291.2	278.5	279.7
42.5°	1394.7	1379.9	1099.7	639.5	377.5	330.2	303.0	279.0	258.2	246.5	247.2
45°	1497.9	1464.7	1099.4	595.2	345.5	308.5	279.7	245.7	226.5	215.5	215.0
47.5°	1607.4	1545.7	1085.9	546.2	314.5	284.5	243.7	217.7	205.0	198.2	196.7
50°	1720.4	1621.4	1062.9	490.0	282.7	257.2	221.2	203.5	193.7	187.5	185.2
52.5°	1826.7	1690.2	1035.2	426.2	250.5	230.7	211.2	197.5	187.2	180.2	177.2
55°	1925.4	1749.4	996.0	361.0	224.2	213.0	206.5	195.0	183.2	175.0	171.7
57.5°	2013.2	1787.9	928.2	299.7	205.5	200.7	201.5	190.7	177.2	170.2	165.7
60°	2086.2	1816.2	828.0	243.0	190.2	188.7	193.7	182.7	167.0	159.0	155.5
62.5°	2129.9	1815.7	705.0	199.0	177.2	177.7	183.5	172.7	156.7	149.2	147.0
65°	2126.1	1771.2	570.0	170.2	164.7	165.2	172.7	161.7	148.2	143.7	143.5
67.5°	2050.9	1662.7	437.2	151.5	151.0	153.2	162.0	154.2	143.0	142.5	143.2
70°	1847.2	1437.4	315.0	136.5	136.7	140.0	151.5	149.5	140.2	141.2	141.0
72.5°	1481.2	1095.9	211.5	120.7	121.0	126.2	141.5	145.7	137.5	150.7	152.7
75°	986.5	683.5	136.0	104.0	104.2	111.0	132.7	138.5	130.0	150.2	151.5
77.5°	474.0	307.2	98.5	87.5	87.5	93.7	114.7	124.0	110.7	116.7	107.0
80°	163.7	115.5	77.5	70.5	69.0	73.2	96.7	107.5	95.5	88.0	82.5
82.5°	64.5	60.0	62.2	54.7	49.7	52.5	75.2	88.7	70.2	63.5	63.2
85°	37.0	39.0	44.0	36.2	28.7	32.2	55.2	63.7	53.0	46.7	47.7
87.5°	10.0	13.7	20.2	18.7	13.0	13.7	26.2	35.2	30.5	23.5	24.2
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)