

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: P959813

Luminaire Tested: **NAV-SB1B-735-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959813
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4680.1 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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



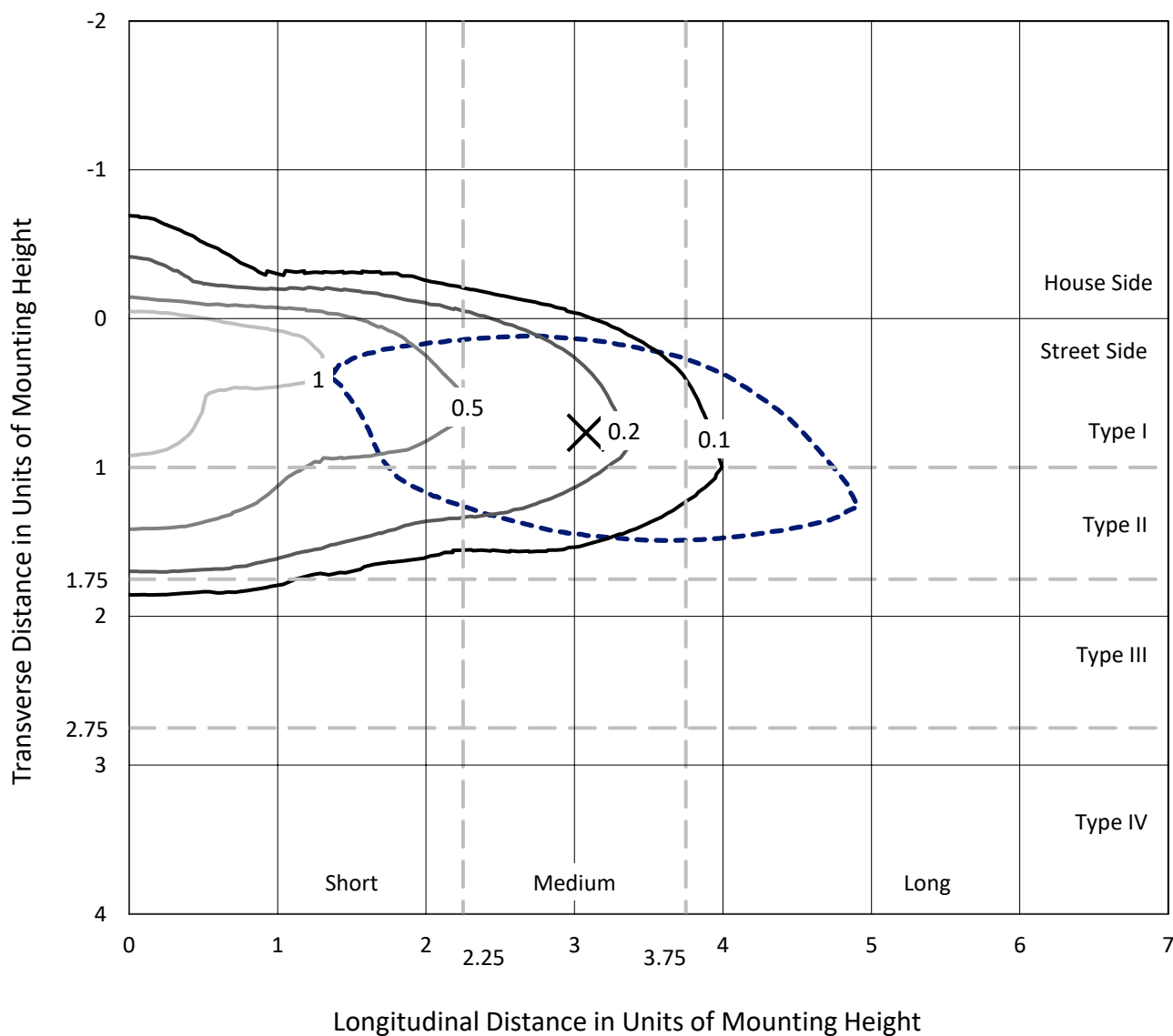
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

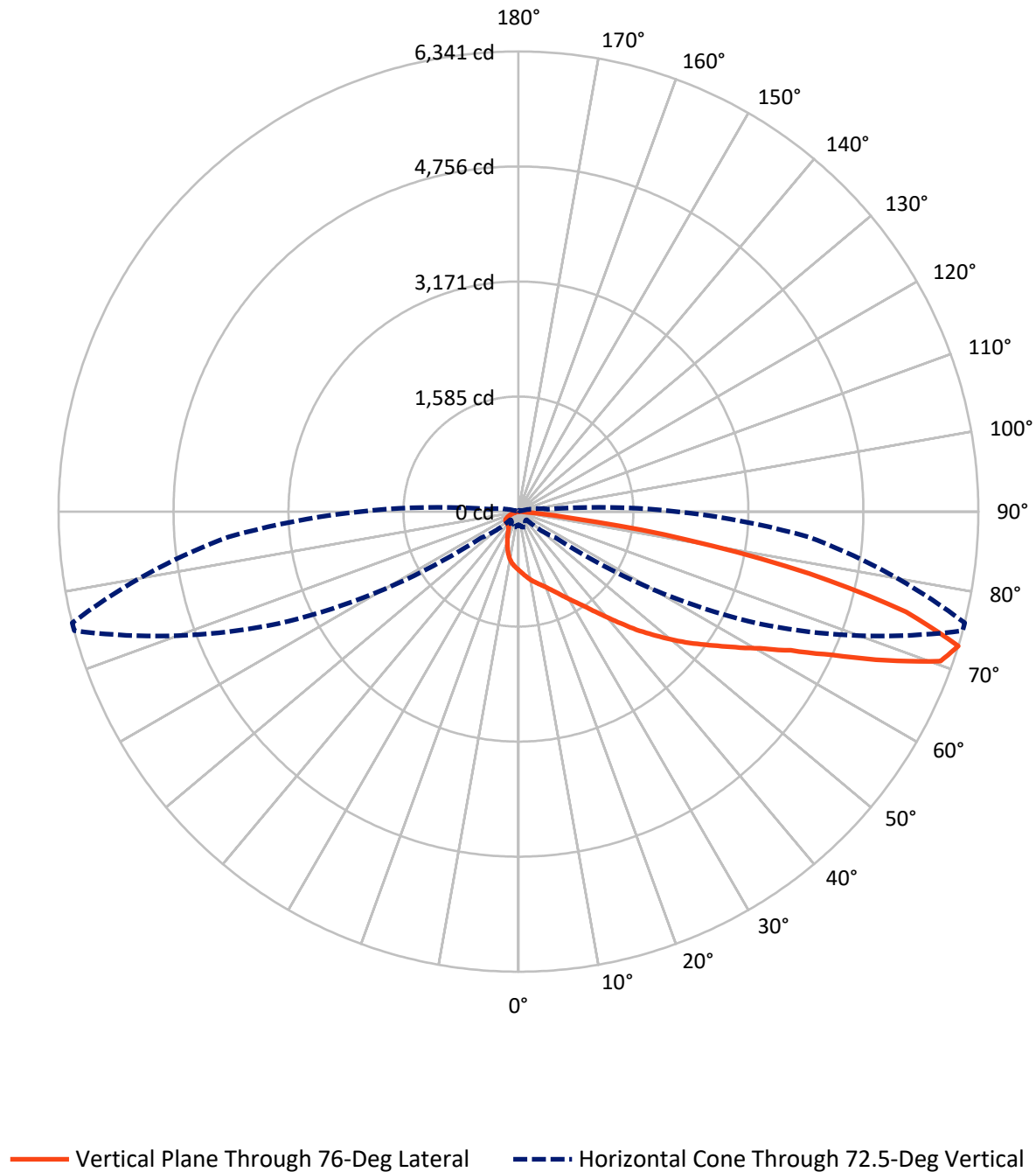
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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	479.0	0.0	479.0
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	4201.1	0.0	4201.1
	% Fixture	89.8	0.0	89.8
Total	Lumens	4680.1	0.0	4680.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	1.6
10°-20°	197.2	4.2
20°-30°	312.2	6.7
30°-40°	483.0	10.3
40°-50°	733.5	15.7
50°-60°	1011.3	21.6
60°-70°	1068.3	22.8
70°-80°	732.9	15.7
80°-90°	68.2	1.5
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°	4680.1	100.0
0°-180°	4680.1	100.0

Coefficient of Utilization



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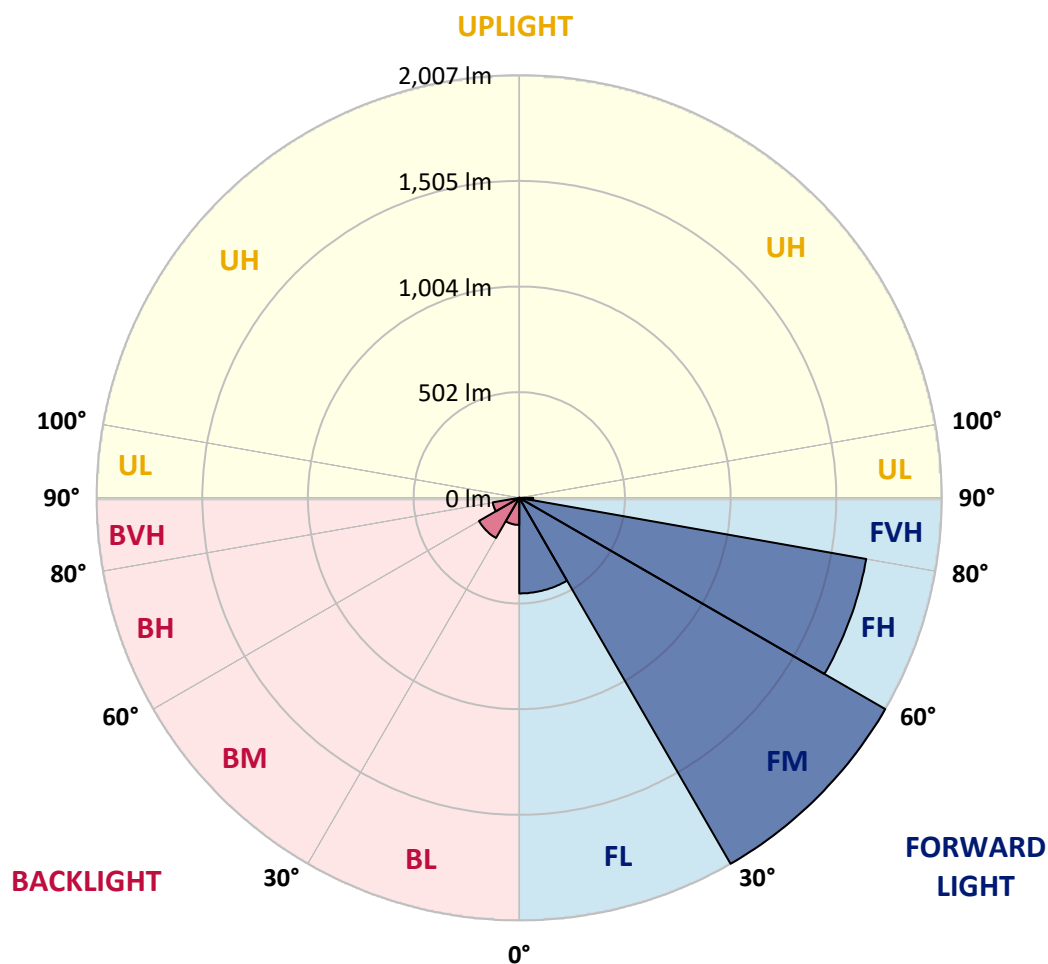
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	454.2	9.7			
FM	(30°-60°)	2007.2	42.9			
FH	(60°-80°)	1673.4	35.8			G1/1800
FVH	(80°-90°)	66.4	1.4			G1/100
BL	(0°-30°)	128.8	2.8	B1/500		
BM	(30°-60°)	220.5	4.7	B1/1000		
BH	(60°-80°)	127.9	2.7	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7
2.5°	940.2	927.8	930.2	917.8	911.9	898.0	883.4	864.3	843.1	843.1	822.5
5°	1039.2	1031.4	1031.4	1016.7	1005.5	983.6	957.6	923.8	883.8	879.9	840.6
7.5°	1099.9	1095.0	1098.1	1089.6	1080.5	1057.7	1026.7	982.8	926.0	921.1	862.2
10°	1111.7	1111.4	1119.9	1122.4	1128.4	1116.9	1089.3	1038.6	967.6	960.5	880.7
12.5°	1065.9	1060.2	1081.1	1105.7	1140.3	1155.8	1141.5	1089.6	1005.5	995.8	898.0
15°	990.7	991.8	1011.9	1049.8	1107.5	1162.8	1181.3	1139.4	1044.1	1032.5	914.4
17.5°	947.5	943.0	960.2	994.2	1058.0	1136.0	1199.8	1185.8	1085.1	1071.9	931.1
20°	942.4	942.1	946.0	961.4	1010.0	1097.8	1197.7	1231.0	1133.3	1118.2	955.1
22.5°	978.2	977.5	974.3	971.2	984.5	1060.5	1188.6	1274.2	1190.9	1174.6	989.1
25°	1033.1	1032.2	1027.0	1008.5	995.5	1040.4	1180.1	1314.3	1259.3	1241.1	1030.4
27.5°	1100.2	1099.6	1090.2	1062.3	1028.6	1042.2	1175.8	1355.6	1338.2	1320.3	1078.1
30°	1182.5	1181.3	1161.8	1122.4	1078.4	1071.1	1181.6	1402.0	1420.5	1406.8	1133.0
32.5°	1285.8	1282.4	1256.9	1197.4	1135.7	1109.7	1192.5	1449.7	1517.9	1505.2	1206.5
35°	1365.6	1360.4	1345.5	1293.0	1202.2	1157.0	1218.0	1506.1	1635.2	1623.9	1300.3
37.5°	1434.2	1429.1	1416.9	1373.8	1297.5	1217.4	1259.0	1581.4	1773.6	1768.1	1414.7
40°	1508.3	1499.8	1493.9	1447.8	1378.9	1304.5	1317.6	1669.4	1932.9	1933.6	1552.3
42.5°	1565.3	1562.0	1562.6	1527.0	1457.6	1407.7	1395.3	1768.7	2123.9	2129.7	1717.7
45°	1614.2	1611.5	1622.7	1597.8	1536.8	1475.5	1486.4	1881.1	2332.8	2344.7	1902.9
47.5°	1651.9	1654.9	1671.0	1654.9	1619.1	1523.1	1567.1	2002.2	2552.4	2553.8	2094.2
50°	1689.5	1690.7	1717.4	1709.5	1694.9	1583.5	1641.5	2137.6	2783.6	2786.4	2273.0
52.5°	1701.3	1699.6	1742.0	1761.5	1762.1	1658.2	1737.8	2285.1	3010.4	3019.2	2456.9
55°	1640.6	1645.7	1714.4	1793.3	1824.6	1761.5	1867.7	2471.9	3252.1	3255.7	2639.2
57.5°	1343.7	1372.3	1524.1	1707.1	1865.0	1909.3	2054.4	2690.1	3531.1	3527.7	2823.7
60°	815.5	849.4	1031.0	1431.7	1733.2	2057.8	2329.4	3028.4	3835.9	3826.5	3010.4
62.5°	456.0	466.3	524.3	857.0	1318.1	1963.3	2598.2	3462.8	4245.1	4213.3	3194.1
65°	336.1	339.4	353.1	419.8	647.9	1510.0	2539.2	3982.2	4820.2	4763.4	3414.2
67.5°	292.0	295.4	308.7	317.9	289.4	793.2	2092.0	4270.4	5550.3	5475.9	3712.0
70°	245.9	247.7	269.3	275.3	207.0	301.8	1344.0	4181.4	6226.1	6173.0	4031.7
72.5°	183.4	190.6	221.9	236.5	166.0	160.3	632.7	3655.9	6340.5	6341.2	4010.1
75°	124.4	131.2	167.0	194.6	128.1	112.3	255.3	2729.9	5521.2	5521.2	3515.3
77.5°	85.0	90.5	116.2	152.7	97.2	77.1	132.3	1732.6	3961.0	4100.3	2505.5
80°	37.6	41.0	75.0	110.8	73.8	49.8	75.0	948.7	2395.3	2365.9	982.2
82.5°	18.6	21.2	48.0	69.2	47.7	30.6	39.5	451.1	776.3	737.7	153.3
85°	3.7	4.8	25.8	29.4	22.1	13.6	14.9	138.8	93.5	106.9	32.5
87.5°	0.0	0.0	7.9	5.4	2.5	3.1	3.1	12.4	7.3	8.5	8.5
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°	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7	808.7
2.5°	811.5	800.3	775.7	751.4	726.5	703.8	688.0	672.2	662.5	658.2	658.8
5°	817.8	795.1	743.5	689.4	636.0	583.8	544.7	507.9	496.4	477.2	478.5
7.5°	827.9	790.9	709.5	618.4	531.6	455.1	399.9	355.8	338.2	321.2	320.9
10°	834.6	783.0	664.6	542.8	425.4	339.4	286.6	254.7	243.1	232.9	232.6
12.5°	837.3	768.4	612.9	458.1	330.9	258.7	227.0	212.2	208.3	204.6	204.6
15°	839.8	754.1	555.2	376.5	261.4	216.5	204.0	199.2	196.4	194.0	194.0
17.5°	841.8	735.9	489.4	306.1	220.7	199.5	193.4	188.2	186.1	183.4	183.4
20°	849.1	718.3	430.5	252.6	198.5	187.3	180.6	175.2	173.3	171.5	171.8
22.5°	862.8	704.1	373.4	216.5	185.2	174.9	166.4	160.3	159.1	157.8	156.9
25°	879.2	686.4	319.7	193.1	172.1	160.6	151.2	146.1	144.8	145.1	144.5
27.5°	900.2	667.0	273.6	178.2	160.6	147.3	136.6	132.6	133.2	134.5	133.9
30°	923.2	649.0	237.4	167.9	150.3	135.4	124.7	122.1	124.1	126.0	125.4
32.5°	957.6	633.2	212.2	159.7	141.1	125.7	117.2	113.9	116.2	118.7	118.1
35°	1004.3	625.4	197.9	152.7	133.2	118.1	109.6	107.2	109.6	110.2	109.9
37.5°	1061.7	624.8	191.9	147.0	126.0	111.7	102.3	101.4	103.2	103.5	102.9
40°	1135.7	628.7	187.3	142.7	118.4	104.4	95.6	94.7	95.3	97.5	97.2
42.5°	1229.6	645.1	180.9	137.2	110.2	97.2	90.2	88.0	87.7	90.2	89.9
45°	1347.4	681.2	172.4	128.4	102.9	91.1	84.0	81.7	80.8	81.4	82.3
47.5°	1475.8	725.6	163.9	120.2	97.8	86.2	79.2	76.2	74.7	74.7	74.7
50°	1600.2	775.7	158.2	111.7	94.1	81.7	74.1	71.0	68.6	68.0	67.6
52.5°	1723.5	824.8	153.6	103.2	89.9	75.8	69.2	65.9	63.1	61.9	61.3
55°	1835.8	871.7	145.8	95.0	84.4	69.8	64.4	61.0	57.7	55.6	54.6
57.5°	1943.6	910.5	131.2	86.5	75.8	64.1	59.2	55.6	51.7	48.9	47.7
60°	2041.7	930.5	113.0	77.4	67.4	58.0	53.4	50.1	44.9	40.4	39.2
62.5°	2116.3	922.6	93.2	67.1	58.6	52.5	46.7	43.5	37.3	31.9	29.7
65°	2192.9	879.6	74.4	56.2	51.4	45.2	39.2	35.9	28.8	23.1	21.5
67.5°	2292.1	787.5	58.6	46.7	44.3	35.9	30.6	28.5	23.7	18.2	17.0
70°	2355.9	611.7	45.5	37.9	36.4	26.1	23.7	23.4	18.9	13.9	12.4
72.5°	2181.0	401.1	35.0	28.8	26.1	17.0	18.2	18.2	13.6	9.4	8.2
75°	1820.6	234.7	25.2	20.6	14.9	11.0	12.4	12.4	8.5	4.5	3.7
77.5°	1300.3	125.0	16.7	12.7	7.6	4.8	6.7	6.4	2.8	0.3	0.0
80°	497.3	43.2	7.9	5.1	2.2	0.9	0.6	0.3	0.3	0.0	0.0
82.5°	75.8	11.3	1.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)