

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: P962090

Luminaire Tested: **NAV-SB2B-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7926.3 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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

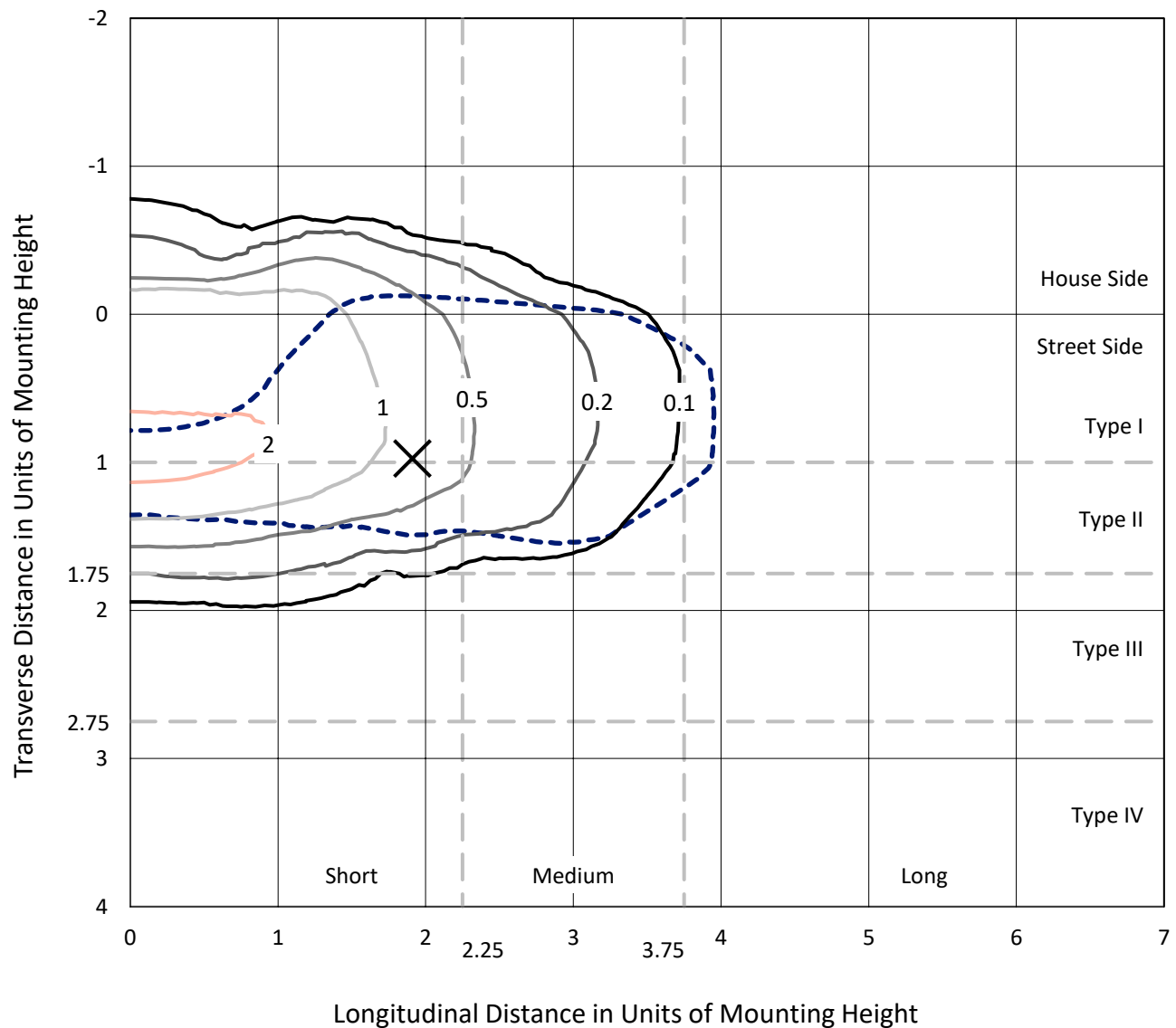


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Iso-Footcandle Lines of Horizontal Illumination

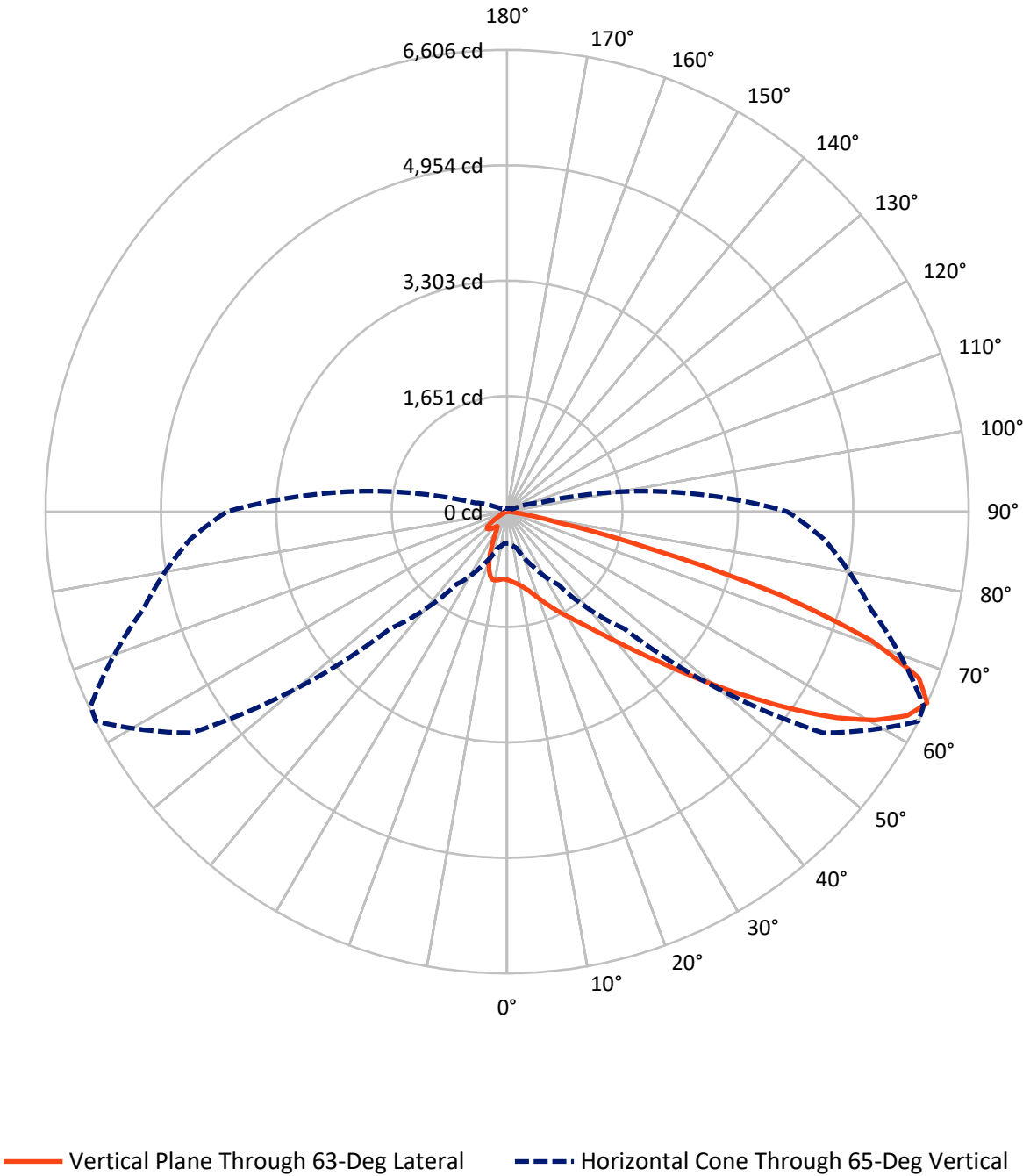
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1165.1	0.0	1165.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	6761.2	0.0	6761.2
	% Fixture	85.3	0.0	85.3
Total	Lumens	7926.3	0.0	7926.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	1.2
10°-20°	255.7	3.2
20°-30°	445.3	5.6
30°-40°	802.6	10.1
40°-50°	1591.8	20.1
50°-60°	2168.4	27.4
60°-70°	1730.8	21.8
70°-80°	783.2	9.9
80°-90°	56.3	0.7
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°	7926.3	100.0
0°-180°	7926.3	100.0

Coefficient of Utilization



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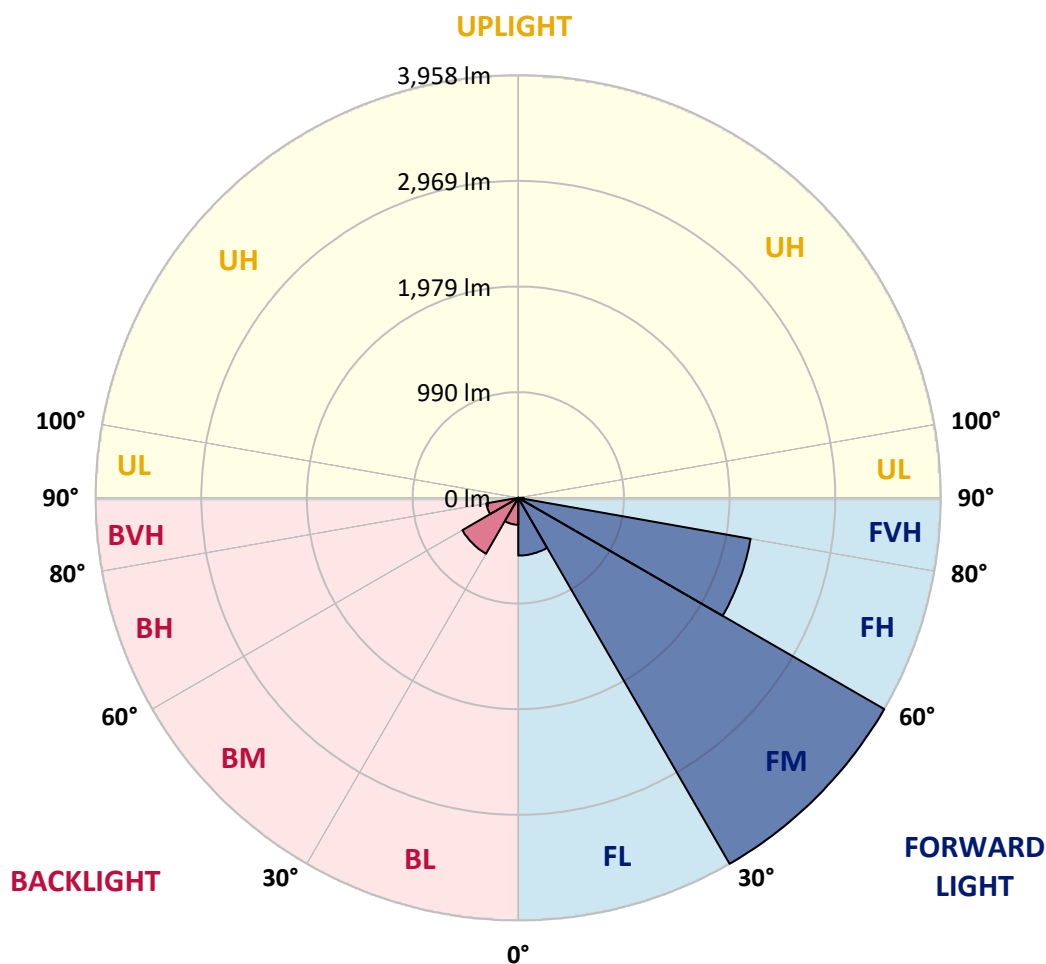
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	541.1	6.8			
FM	(30°-60°)	3958.2	49.9			
FH	(60°-80°)	2209.8	27.9			G2/5000
FVH	(80°-90°)	52.1	0.7			G1/100
BL	(0°-30°)	252.1	3.2	B1/500		
BM	(30°-60°)	604.6	7.6	B1/1000		
BH	(60°-80°)	304.2	3.8	B1/500		G1/500
BVH	(80°-90°)	4.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3
2.5°	1001.1	998.5	1002.2	1000.6	999.5	997.3	996.3	995.2	993.0	991.4	984.8
5°	1003.9	1002.2	1006.0	1009.3	1012.6	1015.9	1017.5	1019.7	1017.5	1013.1	1006.7
7.5°	981.0	979.9	988.1	997.9	1012.6	1025.1	1038.7	1046.4	1046.9	1045.3	1038.2
10°	979.4	976.6	984.8	996.8	1015.9	1038.2	1062.2	1078.6	1080.8	1087.8	1080.2
12.5°	1005.0	1002.2	1013.7	1026.7	1046.4	1069.9	1099.3	1122.2	1125.4	1135.3	1129.9
15°	1048.1	1044.3	1057.3	1074.2	1099.3	1126.1	1157.1	1177.8	1180.6	1192.6	1182.7
17.5°	1098.2	1094.4	1109.7	1127.7	1155.0	1191.5	1227.4	1250.4	1253.7	1261.3	1243.2
20°	1162.6	1157.6	1169.6	1186.0	1214.9	1258.5	1301.6	1334.3	1333.8	1333.8	1304.3
22.5°	1237.3	1229.6	1240.0	1253.1	1280.3	1333.2	1390.5	1429.3	1429.3	1414.0	1365.4
25°	1317.4	1309.8	1321.2	1333.2	1357.2	1417.3	1484.3	1532.3	1534.4	1508.3	1430.9
27.5°	1417.8	1407.9	1416.7	1430.9	1445.0	1506.1	1585.7	1641.3	1642.5	1602.1	1493.0
30°	1610.8	1583.0	1555.7	1540.5	1547.0	1607.5	1692.6	1754.2	1759.6	1704.1	1560.7
32.5°	1964.1	1958.7	1862.7	1737.3	1671.9	1716.6	1812.0	1886.2	1889.5	1818.0	1648.4
35°	2513.3	2506.7	2352.4	2113.5	1900.4	1862.7	1957.0	2044.9	2042.7	1962.0	1762.4
37.5°	3168.7	3162.7	2959.3	2639.8	2294.6	2083.6	2144.1	2236.2	2249.9	2144.1	1909.6
40°	3728.7	3706.4	3577.7	3269.5	2818.0	2450.1	2410.2	2471.3	2485.4	2360.1	2096.6
42.5°	4153.0	4133.9	4068.4	3875.9	3451.7	2992.1	2723.7	2747.2	2763.0	2612.5	2311.5
45°	4372.8	4368.3	4394.5	4376.5	4097.3	3657.3	3172.0	3074.4	3080.3	2892.2	2555.2
47.5°	4403.8	4401.7	4521.1	4690.1	4652.5	4407.6	3747.3	3482.2	3461.0	3207.9	2820.3
50°	4220.5	4216.2	4445.2	4762.0	5023.2	5038.0	4400.5	3941.9	3895.0	3534.6	3096.7
52.5°	3635.5	3634.3	4010.6	4538.0	5153.6	5589.8	5046.2	4446.9	4368.3	3880.3	3389.0
55°	2797.3	2817.5	3248.8	3872.1	4915.8	5855.4	5625.8	5007.4	4886.9	4228.2	3658.4
57.5°	1981.6	2011.0	2437.4	2992.6	4178.6	5698.3	6017.9	5569.1	5439.3	4575.0	3931.6
60°	1064.5	1090.6	1517.5	2180.1	3108.7	5112.7	6224.5	6056.6	5933.9	4904.4	4178.0
62.5°	634.2	642.9	819.6	1407.4	2102.7	3906.0	6136.8	6428.0	6327.0	5180.9	4392.3
65°	455.3	456.9	545.8	859.4	1276.5	2373.1	5521.1	6605.7	6574.7	5389.1	4551.0
67.5°	383.3	382.2	419.3	570.9	869.7	1188.7	4231.5	6354.3	6486.3	5521.1	4641.0
70°	328.8	330.5	374.0	418.2	653.8	672.9	2103.7	5532.5	5813.9	5556.0	4635.6
72.5°	244.9	250.3	290.7	381.2	493.5	463.0	726.3	4102.3	4611.0	5234.8	4395.1
75°	172.8	175.6	204.5	320.6	368.1	337.0	370.8	2120.6	2772.8	4013.4	3597.3
77.5°	133.0	138.0	154.9	224.1	362.6	236.7	226.8	734.0	1127.7	2424.3	2466.4
80°	72.0	80.7	111.8	162.0	254.6	167.4	112.3	292.2	382.2	1133.6	951.0
82.5°	37.1	41.4	78.0	116.6	145.0	146.2	55.7	121.6	157.5	350.0	130.3
85°	14.8	18.0	52.4	64.4	74.7	72.0	25.1	49.1	56.7	97.1	39.8
87.5°	3.3	5.4	19.1	14.8	14.1	15.3	6.0	11.5	10.9	11.5	7.1
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°	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3	978.3
2.5°	984.3	982.1	976.1	969.5	961.9	957.6	954.8	954.3	950.5	947.7	950.5
5°	1000.6	998.5	987.0	973.3	958.6	947.2	936.2	926.5	912.2	909.6	908.5
7.5°	1033.3	1027.4	1008.8	990.3	962.5	929.2	888.9	842.4	801.0	788.5	782.5
10°	1073.7	1065.5	1042.0	1009.3	947.7	857.2	759.6	669.1	597.1	577.0	569.3
12.5°	1119.5	1112.4	1081.3	1020.8	886.1	722.0	572.6	460.2	390.4	373.0	368.1
15°	1174.0	1163.7	1120.5	1003.4	775.9	548.6	393.2	326.7	301.6	298.3	295.0
17.5°	1231.8	1214.9	1155.5	940.6	627.6	389.9	303.7	284.6	273.8	270.5	268.9
20°	1284.7	1262.9	1176.2	845.7	468.9	303.7	272.1	259.5	249.8	245.9	243.7
22.5°	1337.6	1306.6	1176.2	716.5	351.7	269.4	249.8	238.3	226.8	221.9	219.2
25°	1392.7	1351.3	1155.5	572.6	283.0	247.0	228.5	216.0	206.1	200.1	197.9
27.5°	1446.1	1388.9	1108.0	436.2	251.9	227.3	208.9	196.9	187.6	183.3	183.3
30°	1496.8	1426.0	1041.5	331.0	231.8	208.3	190.9	180.5	171.2	166.9	167.4
32.5°	1565.6	1472.8	970.7	271.5	214.3	190.3	174.5	164.7	156.5	153.2	153.2
35°	1661.0	1542.1	909.6	266.6	199.6	175.6	159.8	150.5	142.4	139.6	139.6
37.5°	1796.2	1653.8	877.4	299.4	187.6	162.5	147.8	138.0	130.3	128.1	127.6
40°	1963.1	1805.4	894.8	332.1	179.4	151.1	136.8	127.1	120.5	117.8	117.3
42.5°	2161.0	1992.5	991.4	357.2	173.9	141.2	126.5	115.6	111.2	110.2	110.2
45°	2388.4	2198.1	1139.1	383.9	165.2	131.9	116.1	107.9	104.7	104.1	103.6
47.5°	2646.9	2423.8	1310.4	417.2	156.5	123.2	107.9	102.5	99.8	98.7	98.7
50°	2903.1	2651.3	1486.5	435.7	149.4	115.1	101.5	97.1	94.9	94.3	94.3
52.5°	3171.5	2885.2	1628.8	418.2	143.4	108.5	95.9	92.7	90.5	90.0	90.0
55°	3427.2	3074.4	1653.3	355.0	131.4	102.0	90.0	88.4	85.6	85.6	85.1
57.5°	3647.5	3169.3	1479.9	260.7	119.4	92.1	83.9	82.3	80.2	79.6	79.0
60°	3849.8	3142.0	1142.4	175.6	106.3	82.3	76.4	75.2	73.1	70.3	69.8
62.5°	3963.8	3022.0	781.4	114.5	93.3	72.0	67.6	67.0	62.1	56.7	55.7
65°	4006.8	2775.6	487.5	83.4	78.0	61.6	58.3	57.3	50.1	44.2	43.7
67.5°	3969.2	2369.8	245.9	66.0	61.6	51.2	48.0	48.0	43.0	37.6	37.1
70°	3818.7	1776.5	103.6	52.9	47.5	39.3	39.3	41.4	36.5	30.5	30.0
72.5°	3492.1	1195.3	55.0	40.4	35.5	27.8	32.2	33.8	28.9	22.9	22.9
75°	2776.1	729.1	38.1	30.0	22.3	19.7	24.5	25.6	19.7	15.3	14.8
77.5°	1898.7	418.8	25.6	19.1	14.1	11.5	16.9	15.8	10.4	7.1	7.6
80°	833.7	174.5	14.8	8.7	5.4	4.4	6.0	4.4	3.3	2.2	2.2
82.5°	97.6	40.9	5.4	3.3	2.2	1.1	0.5	0.0	0.0	0.0	0.0
85°	20.2	4.9	2.8	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	1.1	0.5	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)