

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: P959965

Luminaire Tested: **NAV-SB1B-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4423.9 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
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

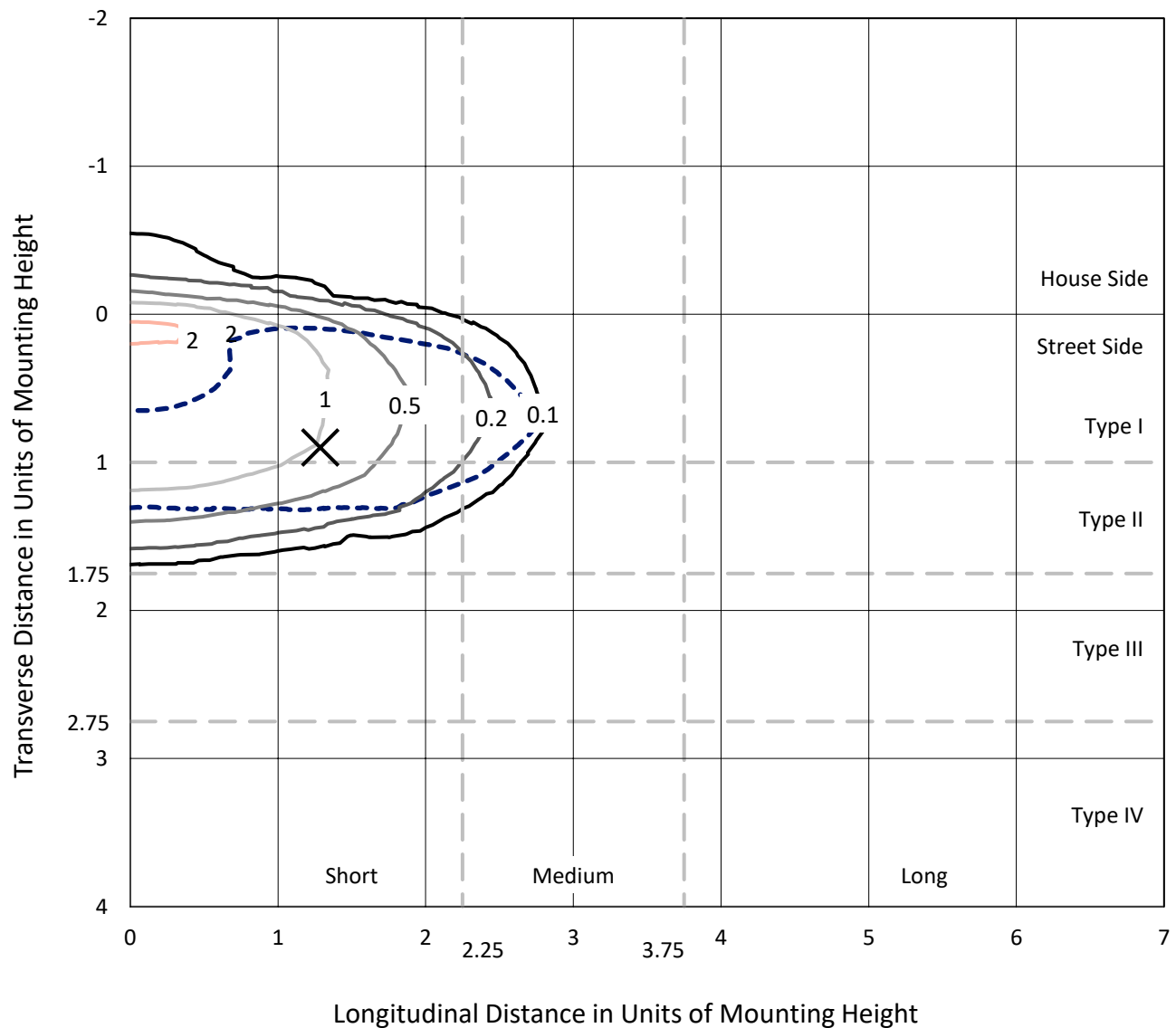


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Iso-Footcandle Lines of Horizontal Illumination

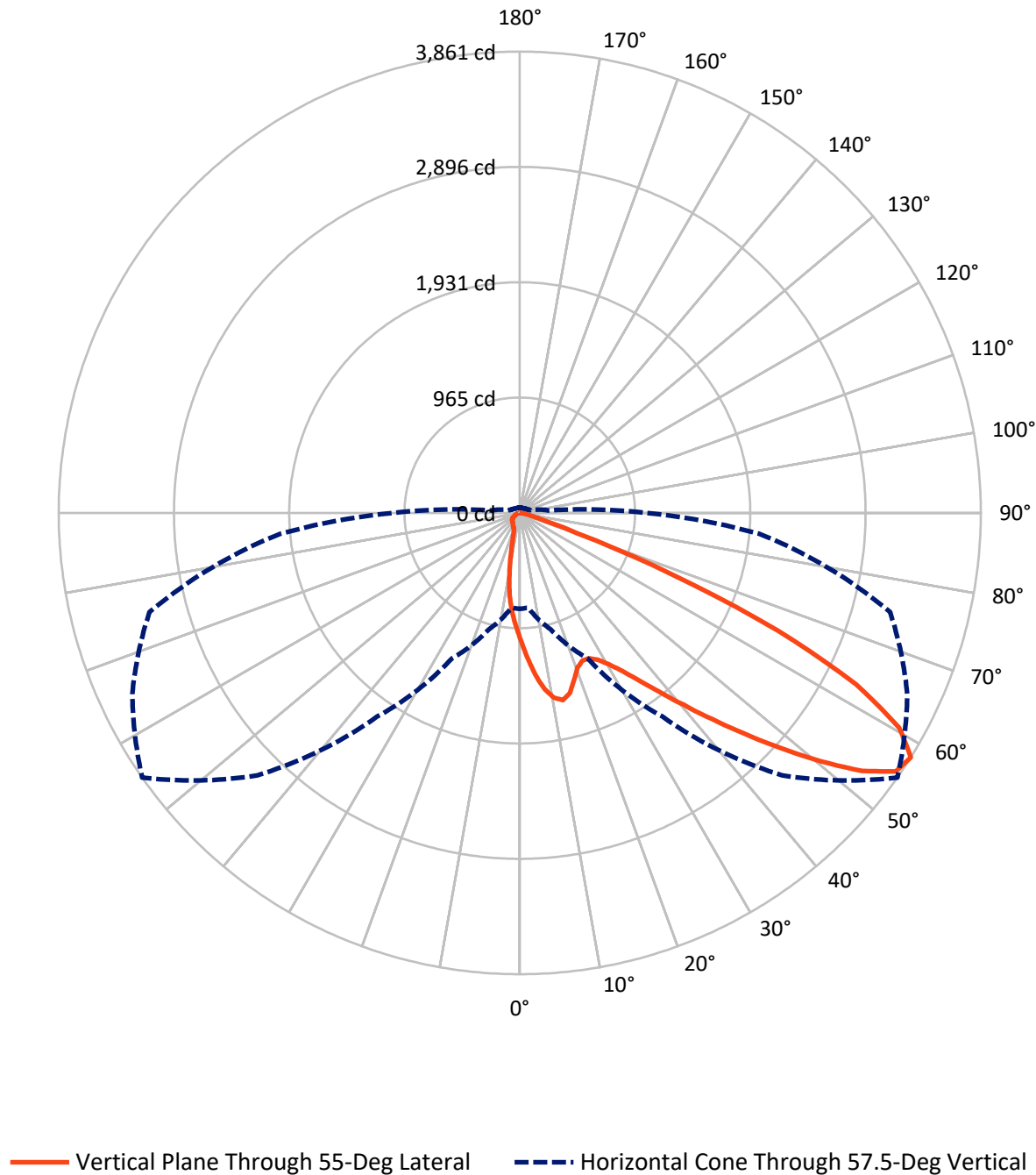
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	345.5	0.0	345.5
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	4078.4	0.0	4078.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	4423.9	0.0	4423.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	2.2
10°-20°	239.6	5.4
20°-30°	383.3	8.7
30°-40°	648.8	14.7
40°-50°	1065.3	24.1
50°-60°	1170.8	26.5
60°-70°	671.6	15.2
70°-80°	137.2	3.1
80°-90°	8.1	0.2
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°	4423.9	100.0
0°-180°	4423.9	100.0

Coefficient of Utilization



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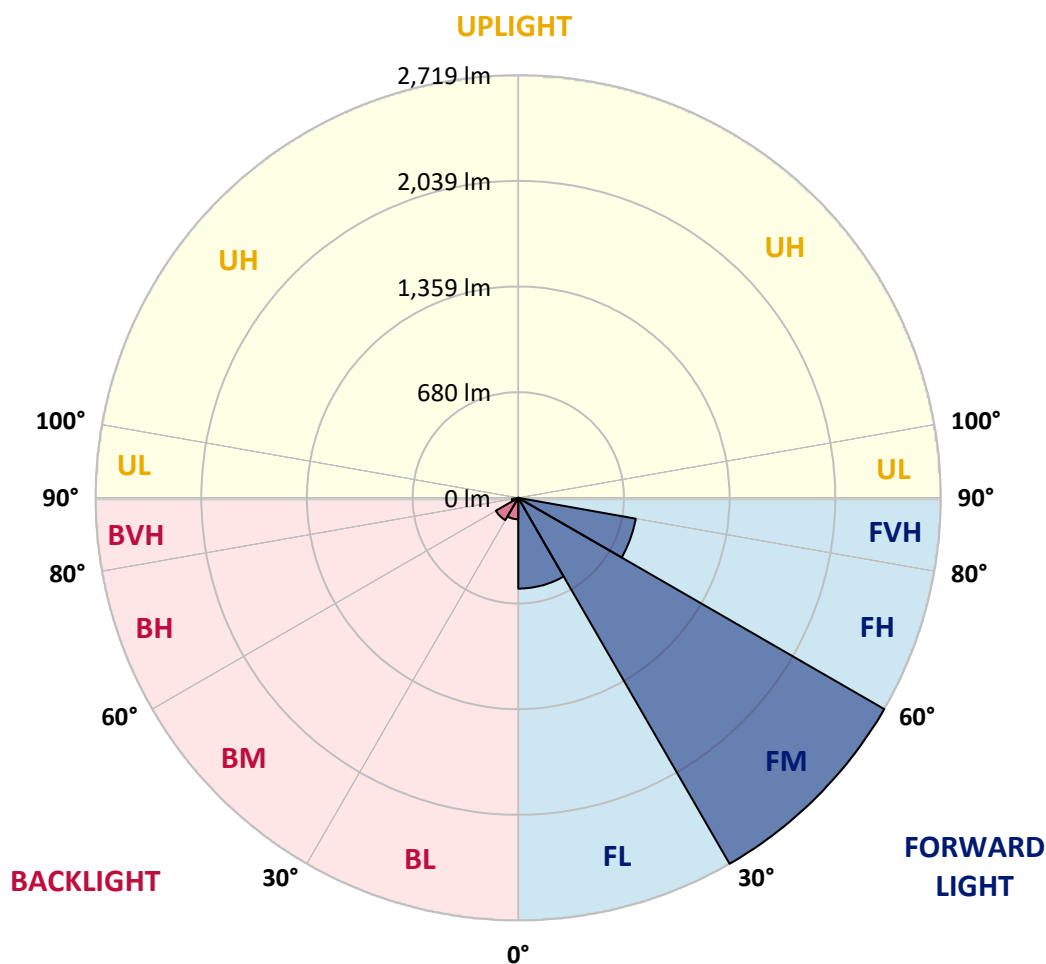
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	584.2	13.2			
FM	(30°-60°)	2719.0	61.5			
FH	(60°-80°)	767.7	17.4			G1/1800
FVH	(80°-90°)	7.6	0.2			G0/10
BL	(0°-30°)	137.9	3.1	B1/500		
BM	(30°-60°)	165.9	3.8	B0/220		
BH	(60°-80°)	41.1	0.9	B0/110		G0/110
BVH	(80°-90°)	0.5	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0
2.5°	1322.8	1306.1	1303.7	1300.4	1268.7	1245.0	1210.6	1173.0	1130.7	1087.6	1068.5
5°	1528.2	1515.1	1512.6	1497.3	1461.3	1421.0	1359.9	1282.7	1203.8	1111.1	1071.2
7.5°	1567.9	1565.5	1576.8	1576.1	1571.2	1539.3	1487.8	1395.8	1277.5	1140.0	1078.3
10°	1390.4	1396.7	1430.0	1459.1	1538.0	1583.8	1572.7	1496.8	1353.3	1173.0	1086.2
12.5°	1228.7	1221.3	1245.0	1278.0	1369.7	1506.0	1607.8	1581.1	1440.0	1210.3	1098.0
15°	1127.2	1124.1	1137.5	1152.8	1222.6	1360.1	1566.9	1649.5	1523.6	1254.5	1115.7
17.5°	1094.7	1092.2	1096.3	1100.1	1145.4	1251.8	1469.5	1691.6	1603.4	1305.0	1135.3
20°	1121.1	1117.9	1117.4	1114.4	1133.1	1205.7	1381.4	1694.5	1675.2	1350.8	1152.2
22.5°	1198.3	1194.5	1181.2	1169.1	1170.8	1212.0	1342.1	1664.5	1729.2	1393.7	1162.9
25°	1338.3	1332.0	1304.2	1263.8	1238.2	1255.6	1348.1	1625.0	1780.7	1427.2	1157.7
27.5°	1513.4	1505.2	1469.5	1409.5	1350.8	1329.5	1391.4	1597.7	1823.6	1452.8	1146.6
30°	1685.0	1674.3	1639.2	1592.5	1506.9	1439.8	1469.7	1609.8	1874.6	1479.6	1131.8
32.5°	1870.2	1860.2	1813.5	1755.6	1684.7	1594.5	1577.0	1668.4	1937.0	1517.0	1121.5
35°	2104.5	2088.7	2022.4	1943.6	1868.3	1776.9	1722.1	1769.6	2020.3	1574.0	1127.2
37.5°	2371.3	2350.0	2278.6	2169.7	2071.5	1969.2	1898.9	1908.7	2142.1	1650.4	1144.9
40°	2622.9	2603.5	2537.5	2434.9	2311.6	2187.5	2112.4	2090.6	2310.6	1743.4	1176.0
42.5°	2773.6	2756.2	2728.4	2685.1	2581.2	2454.6	2359.9	2312.7	2509.6	1854.6	1213.9
45°	2782.2	2766.9	2804.3	2854.7	2834.2	2750.0	2634.6	2548.1	2709.6	1959.2	1253.2
47.5°	2646.9	2636.5	2750.0	2926.2	3014.0	3049.5	2943.1	2763.9	2874.6	2034.2	1269.3
50°	2278.1	2274.3	2507.8	2831.3	3082.5	3311.9	3268.5	2964.6	3002.5	2072.9	1254.0
52.5°	1975.3	1961.3	2097.5	2527.3	2983.0	3449.9	3586.6	3161.6	3092.0	2080.2	1218.3
55°	1498.1	1485.8	1656.6	2018.9	2661.8	3400.8	3819.3	3364.9	3156.2	2061.5	1154.1
57.5°	803.6	796.0	1011.8	1343.8	2080.9	3106.3	3861.3	3579.8	3210.2	2011.6	1064.5
60°	312.9	311.5	392.3	652.0	1264.6	2527.1	3649.3	3708.9	3244.0	1950.2	989.4
62.5°	189.3	193.4	206.5	292.7	558.6	1569.9	3160.8	3562.1	3266.6	1894.0	927.5
65°	156.6	156.8	158.5	201.0	267.6	656.8	2379.5	3079.2	3210.7	1793.9	839.7
67.5°	134.2	136.6	143.0	159.6	188.8	288.0	1369.9	2385.3	2870.5	1560.9	702.7
70°	105.9	109.2	117.1	131.2	145.7	180.3	506.2	1587.1	2192.9	1176.5	531.4
72.5°	89.2	89.0	93.1	106.7	115.6	126.9	194.7	889.3	1274.5	561.7	263.0
75°	69.0	71.8	76.9	89.2	94.6	91.9	105.6	324.9	456.6	170.3	89.5
77.5°	54.0	56.2	60.8	72.9	78.3	65.2	60.8	116.2	146.8	61.1	40.4
80°	24.3	26.1	41.5	53.7	63.9	45.0	33.0	59.4	65.2	27.8	20.5
82.5°	4.4	7.4	24.3	28.4	32.7	29.2	17.2	30.9	31.9	11.2	7.1
85°	0.3	0.5	8.5	10.4	13.1	9.5	5.2	12.3	10.7	3.8	2.8
87.5°	0.0	0.0	0.0	0.3	0.3	1.3	1.6	2.2	1.6	1.3	1.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0	1066.0
2.5°	1048.9	1010.1	972.5	941.7	923.6	893.1	872.9	869.6	861.2	868.6
5°	1028.7	959.4	889.3	826.6	775.0	708.4	658.8	637.8	619.5	625.8
7.5°	1019.2	909.8	800.6	693.4	583.2	476.8	397.7	364.7	339.6	343.2
10°	1006.3	858.2	687.2	523.5	375.9	270.9	216.3	196.1	184.9	185.2
12.5°	996.5	796.5	555.3	354.9	228.9	172.9	156.0	151.1	147.8	148.1
15°	991.6	724.0	425.3	236.5	163.7	146.5	142.4	140.2	138.1	137.8
17.5°	983.4	643.2	311.3	172.7	143.2	137.2	133.7	131.2	128.4	127.9
20°	971.1	551.6	227.6	146.0	134.2	129.6	124.6	121.4	118.1	117.6
22.5°	948.4	454.7	174.9	135.0	127.7	122.5	116.4	112.6	109.4	108.9
25°	906.5	363.9	147.3	128.2	122.0	115.6	109.2	103.9	101.0	100.3
27.5°	853.3	285.9	133.7	122.0	114.6	108.9	101.5	96.6	93.8	93.3
30°	790.6	220.2	125.8	114.8	105.9	101.0	94.4	90.3	88.7	88.7
32.5°	722.9	176.0	122.5	107.7	98.2	92.8	87.5	85.9	85.4	85.1
35°	659.3	152.7	120.8	102.0	91.4	86.2	84.0	84.3	85.4	85.4
37.5°	602.9	145.3	120.0	97.9	85.4	80.8	82.1	84.6	83.4	83.4
40°	551.9	146.2	119.5	94.9	80.5	77.7	80.5	78.5	75.8	75.5
42.5°	512.8	153.0	118.4	92.5	77.5	75.5	74.5	71.4	71.2	71.8
45°	484.5	159.1	118.1	91.4	74.2	70.6	69.3	66.3	71.8	73.1
47.5°	450.9	159.1	118.1	87.5	68.8	67.3	65.2	61.9	67.3	68.8
50°	407.5	148.9	113.5	83.2	64.4	63.6	59.8	55.7	54.5	55.4
52.5°	352.7	130.7	101.8	77.2	60.0	58.4	53.7	50.7	49.9	49.9
55°	290.3	109.4	85.9	68.5	55.4	52.4	49.1	47.8	46.9	46.3
57.5°	236.0	89.8	69.0	60.8	51.0	47.2	46.1	44.5	43.0	42.3
60°	193.7	70.6	57.0	54.0	46.6	43.0	42.8	40.7	37.1	36.6
62.5°	149.4	51.9	48.0	46.9	42.3	39.3	38.7	34.3	28.9	27.8
65°	105.6	40.4	38.7	41.2	37.6	35.0	33.5	27.0	21.3	20.5
67.5°	74.2	33.8	30.5	36.0	32.7	29.2	28.4	23.0	17.7	17.2
70°	52.9	27.6	25.1	30.9	26.1	25.6	24.0	19.1	14.5	13.9
72.5°	37.4	21.0	19.4	26.8	18.0	22.1	19.7	14.8	10.9	10.4
75°	27.6	15.0	13.6	15.6	13.1	16.6	13.9	9.8	6.9	6.6
77.5°	20.2	9.5	8.2	7.7	7.7	10.4	7.7	4.1	3.0	2.8
80°	14.1	4.4	3.8	3.3	3.0	2.5	1.1	0.5	0.3	0.3
82.5°	8.5	1.9	1.9	1.3	0.8	0.0	0.0	0.0	0.0	0.0
85°	1.9	0.8	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.3	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

(END OF REPORT)