

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: P959314

Luminaire Tested: **NAV-SB1A-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959314
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-SB1A-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4149.2 lumens
Efficiency: N/A
Efficacy: 134.3 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): 30.9
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



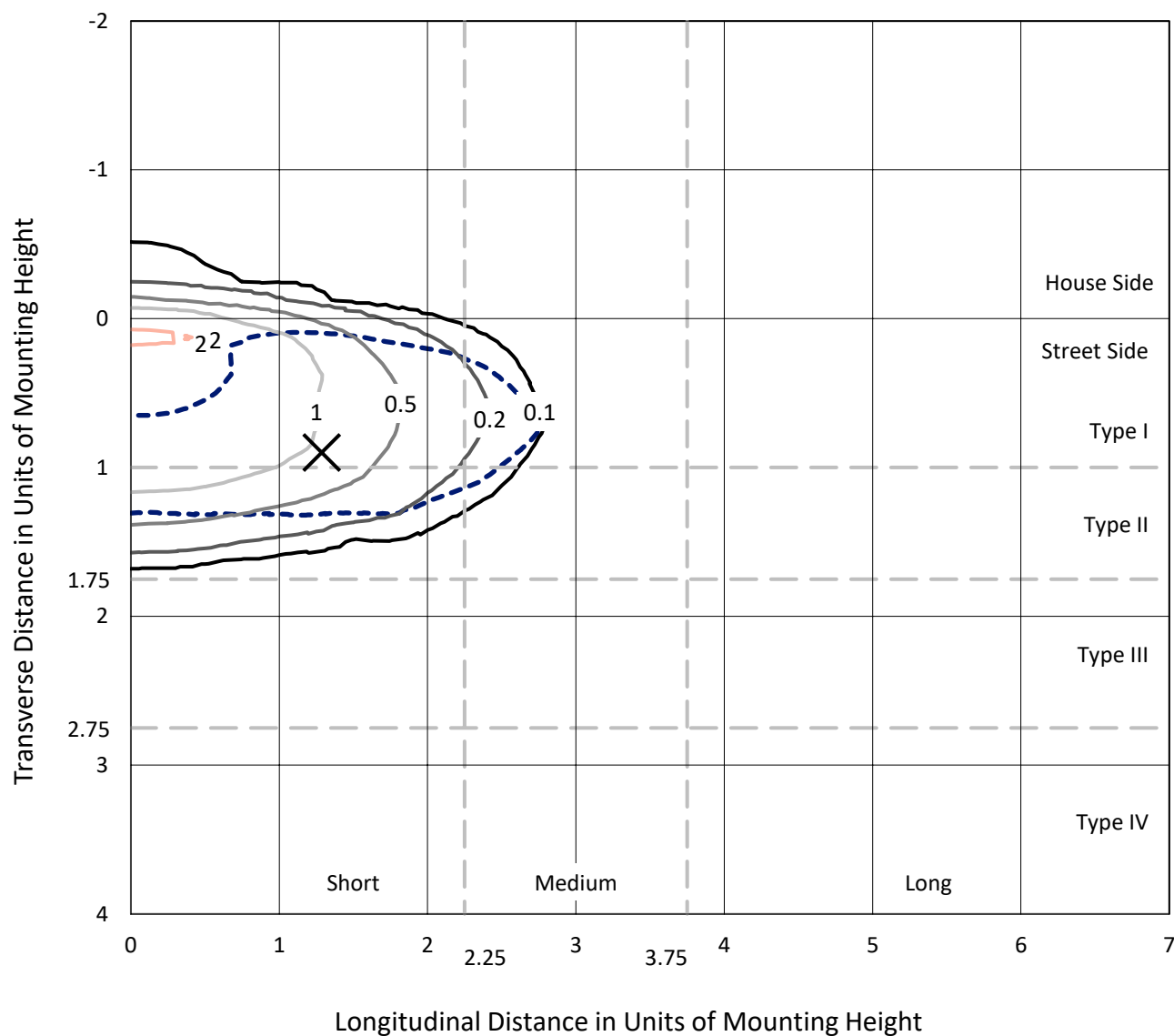
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

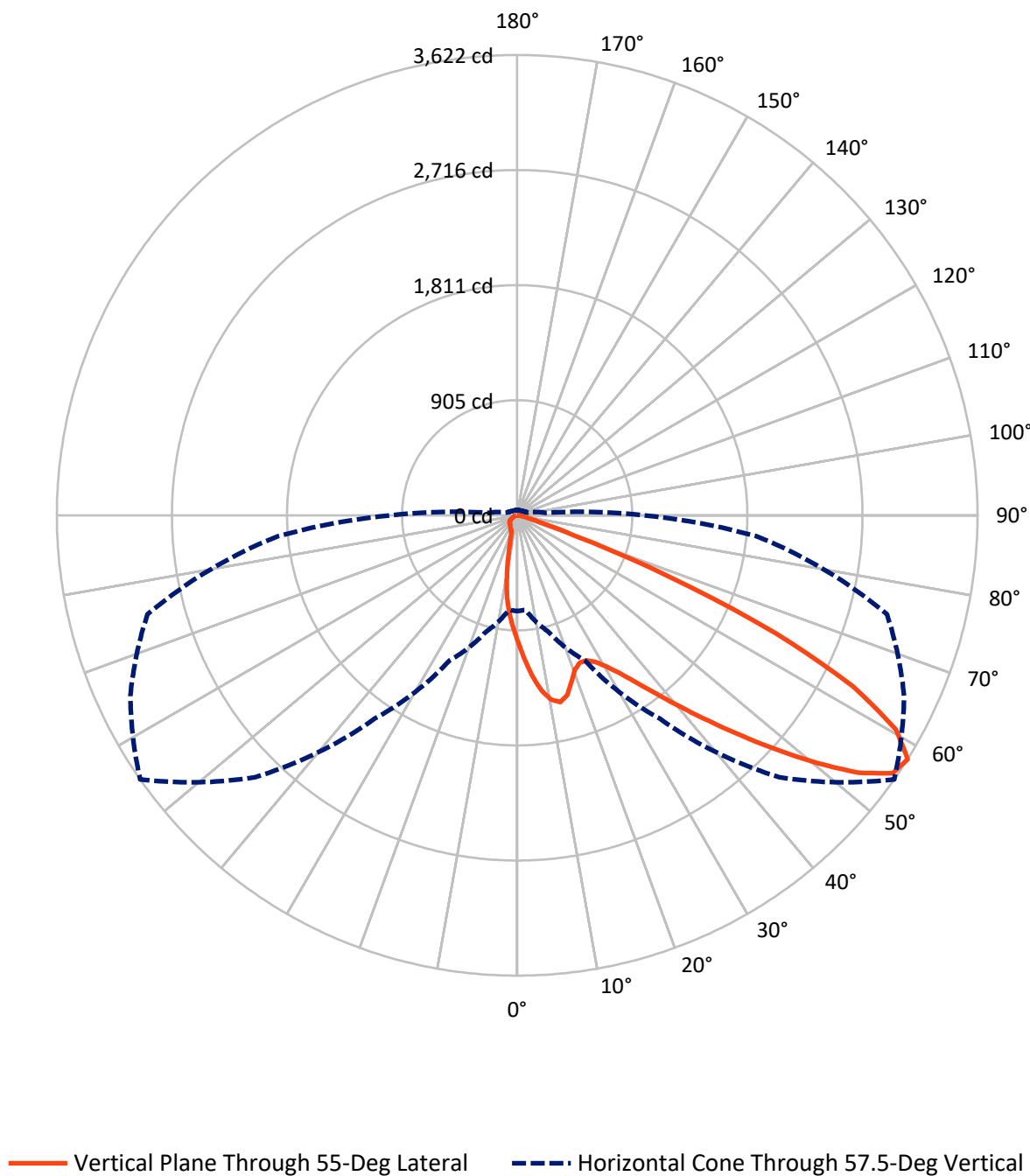


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc

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	324.0	0.0	324.0
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	3825.1	0.0	3825.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	4149.2	0.0	4149.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	2.2
10°-20°	224.7	5.4
20°-30°	359.5	8.7
30°-40°	608.5	14.7
40°-50°	999.1	24.1
50°-60°	1098.1	26.5
60°-70°	629.9	15.2
70°-80°	128.7	3.1
80°-90°	7.6	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°	4149.2	100.0
0°-180°	4149.2	100.0

Coefficient of Utilization



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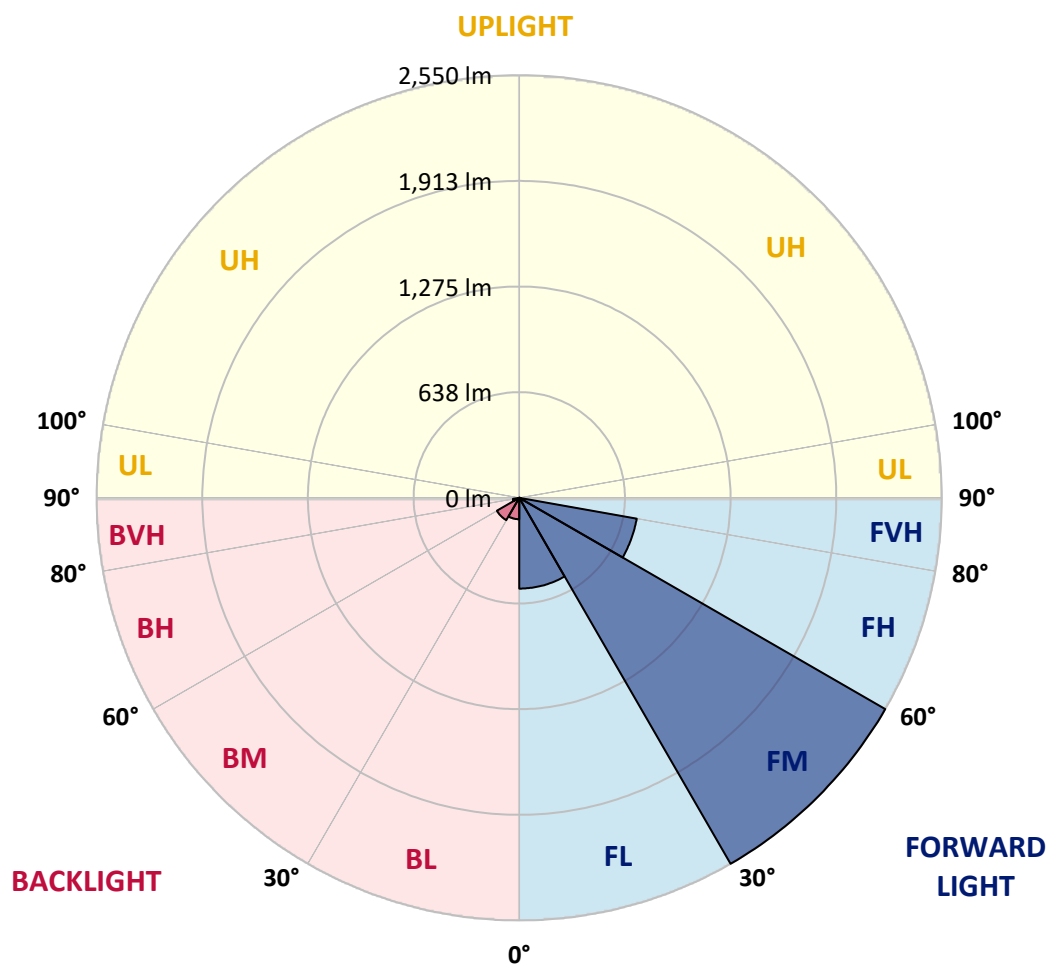
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	547.9	13.2			
FM	(30°-60°)	2550.1	61.5			
FH	(60°-80°)	720.0	17.4			G1/1800
FVH	(80°-90°)	7.1	0.2			G0/10
BL	(0°-30°)	129.4	3.1	B1/500		
BM	(30°-60°)	155.6	3.8	B0/220		
BH	(60°-80°)	38.5	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°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9
2.5°	1240.6	1225.0	1222.7	1219.6	1189.9	1167.7	1135.5	1100.1	1060.5	1020.1	1002.1
5°	1433.3	1421.0	1418.7	1404.4	1370.6	1332.7	1275.4	1203.0	1129.0	1042.1	1004.7
7.5°	1470.6	1468.3	1478.8	1478.3	1473.6	1443.7	1395.4	1309.1	1198.1	1069.2	1011.4
10°	1304.1	1309.9	1341.1	1368.6	1442.5	1485.4	1475.0	1403.8	1269.3	1100.1	1018.7
12.5°	1152.3	1145.4	1167.7	1198.6	1284.6	1412.6	1508.0	1482.9	1350.6	1135.2	1029.8
15°	1057.2	1054.3	1066.9	1081.2	1146.7	1275.6	1469.5	1547.1	1429.0	1176.6	1046.4
17.5°	1026.7	1024.4	1028.3	1031.9	1074.3	1174.1	1378.2	1586.5	1503.9	1224.0	1064.9
20°	1051.5	1048.5	1048.0	1045.1	1062.8	1130.9	1295.6	1589.4	1571.1	1267.0	1080.7
22.5°	1123.9	1120.3	1107.8	1096.5	1098.1	1136.7	1258.8	1561.2	1621.9	1307.1	1090.7
25°	1255.2	1249.3	1223.2	1185.3	1161.3	1177.6	1264.4	1524.1	1670.1	1338.5	1085.8
27.5°	1419.4	1411.7	1378.2	1321.9	1267.0	1247.0	1305.1	1498.6	1710.3	1362.6	1075.3
30°	1580.3	1570.4	1537.4	1493.6	1413.3	1350.3	1378.5	1509.7	1758.2	1387.7	1061.5
32.5°	1754.1	1744.7	1700.9	1646.7	1580.1	1495.5	1479.1	1564.8	1816.8	1422.8	1051.8
35°	1973.8	1959.0	1896.9	1823.0	1752.3	1666.5	1615.2	1659.7	1894.8	1476.2	1057.2
37.5°	2224.0	2204.2	2137.1	2035.0	1942.9	1846.9	1780.9	1790.2	2009.2	1547.9	1073.8
40°	2460.0	2441.9	2379.9	2283.7	2168.1	2051.6	1981.3	1960.8	2167.1	1635.1	1103.0
42.5°	2601.4	2585.0	2559.0	2518.3	2420.8	2302.1	2213.4	2169.1	2353.8	1739.5	1138.6
45°	2609.4	2595.1	2630.1	2677.4	2658.2	2579.2	2471.0	2389.9	2541.4	1837.5	1175.4
47.5°	2482.4	2472.8	2579.2	2744.4	2826.8	2860.2	2760.3	2592.2	2696.2	1907.8	1190.4
50°	2136.6	2133.0	2352.0	2655.5	2891.1	3106.3	3065.6	2780.5	2816.1	1944.2	1176.1
52.5°	1852.6	1839.6	1967.2	2370.4	2797.7	3235.7	3363.8	2965.3	2900.0	1951.1	1142.6
55°	1405.1	1393.6	1553.8	1893.5	2496.6	3189.7	3582.2	3155.9	2960.2	1933.5	1082.5
57.5°	753.7	746.6	948.9	1260.3	1951.6	2913.4	3621.5	3357.5	3010.8	1886.6	998.4
60°	293.5	292.2	367.9	611.5	1186.1	2370.2	3422.8	3478.5	3042.5	1829.0	927.9
62.5°	177.5	181.4	193.7	274.5	524.0	1472.4	2964.5	3340.9	3063.8	1776.3	869.9
65°	146.9	147.1	148.6	188.6	251.0	616.1	2231.7	2888.0	3011.3	1682.4	787.5
67.5°	125.9	128.2	134.1	149.6	177.0	270.2	1284.8	2237.2	2692.3	1464.0	659.1
70°	99.2	102.3	109.8	123.1	136.6	169.1	474.9	1488.5	2056.8	1103.5	498.4
72.5°	83.6	83.4	87.2	100.0	108.4	119.0	182.7	834.0	1195.4	526.7	246.6
75°	64.8	67.2	72.2	83.6	88.8	86.2	99.0	304.7	428.2	159.7	83.9
77.5°	50.6	52.7	57.1	68.3	73.4	61.2	57.1	109.0	137.7	57.3	37.8
80°	22.8	24.6	38.8	50.4	59.9	42.2	31.0	55.8	61.2	26.1	19.2
82.5°	4.1	6.9	22.8	26.6	30.7	27.4	16.1	28.9	29.9	10.5	6.7
85°	0.2	0.5	7.9	9.7	12.3	8.9	4.8	11.5	9.9	3.6	2.6
87.5°	0.0	0.0	0.0	0.2	0.2	1.2	1.5	2.0	1.5	1.2	1.0
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9	999.9
2.5°	983.7	947.4	912.1	883.1	866.3	837.6	818.7	815.7	807.7	814.7
5°	964.8	899.8	834.0	775.2	726.8	664.4	617.9	598.2	581.1	586.9
7.5°	955.8	853.2	750.9	650.4	547.0	447.2	373.0	342.0	318.6	321.8
10°	943.8	804.9	644.5	491.0	352.6	254.1	202.8	184.0	173.4	173.7
12.5°	934.6	747.1	520.9	332.8	214.6	162.3	146.4	141.8	138.7	138.9
15°	930.0	679.1	398.8	221.8	153.5	137.4	133.6	131.5	129.5	129.3
17.5°	922.3	603.3	291.9	162.0	134.3	128.7	125.4	123.1	120.5	120.0
20°	910.8	517.3	213.4	136.8	125.9	121.6	117.0	113.9	110.8	110.3
22.5°	889.6	426.5	164.0	126.7	119.7	114.9	109.3	105.7	102.6	102.1
25°	850.1	341.3	138.2	120.2	114.4	108.4	102.3	97.5	94.7	94.2
27.5°	800.3	268.1	125.4	114.4	107.4	102.1	95.2	90.6	88.0	87.5
30°	741.5	206.4	118.0	107.7	99.2	94.7	88.6	84.7	83.1	83.1
32.5°	678.0	165.0	114.9	101.1	92.1	87.0	82.1	80.6	80.1	79.8
35°	618.4	143.3	113.4	95.7	85.7	80.9	78.8	79.0	80.1	80.1
37.5°	565.4	136.3	112.5	91.8	80.1	75.7	77.0	79.3	78.3	78.3
40°	517.6	137.1	112.0	89.1	75.4	72.9	75.4	73.7	71.1	70.8
42.5°	481.0	143.5	111.0	86.7	72.7	70.8	69.8	67.0	66.7	67.2
45°	454.4	149.1	110.8	85.7	69.6	66.2	65.0	62.2	67.2	68.6
47.5°	422.9	149.1	110.8	82.1	64.5	63.2	61.2	58.1	63.2	64.5
50°	382.2	139.7	106.4	78.0	60.4	59.7	56.1	52.2	51.1	52.0
52.5°	330.8	122.6	95.4	72.4	56.3	54.7	50.4	47.6	46.8	46.8
55°	272.2	102.6	80.6	64.3	52.0	49.1	46.0	44.8	44.0	43.5
57.5°	221.3	84.2	64.8	57.1	47.9	44.3	43.3	41.7	40.4	39.7
60°	181.6	66.2	53.5	50.6	43.8	40.4	40.2	38.1	34.7	34.2
62.5°	140.2	48.6	45.0	44.0	39.7	36.8	36.3	32.3	27.2	26.1
65°	99.0	37.8	36.3	38.6	35.3	32.7	31.5	25.3	20.0	19.2
67.5°	69.6	31.8	28.7	33.7	30.7	27.4	26.6	21.5	16.6	16.1
70°	49.6	25.8	23.6	28.9	24.6	24.1	22.5	17.9	13.5	13.0
72.5°	35.1	19.7	18.1	25.1	16.9	20.7	18.4	13.8	10.2	9.7
75°	25.8	14.0	12.8	14.6	12.3	15.6	13.0	9.2	6.4	6.1
77.5°	19.0	8.9	7.7	7.2	7.2	9.7	7.2	3.8	2.8	2.6
80°	13.3	4.1	3.6	3.1	2.8	2.3	1.0	0.5	0.2	0.2
82.5°	7.9	1.7	1.7	1.2	0.7	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.7	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.2	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)