

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: P959841

Luminaire Tested: **NAV-SB1B-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959841
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-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 5208 lumens
Efficiency: N/A
Efficacy: 130.9 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

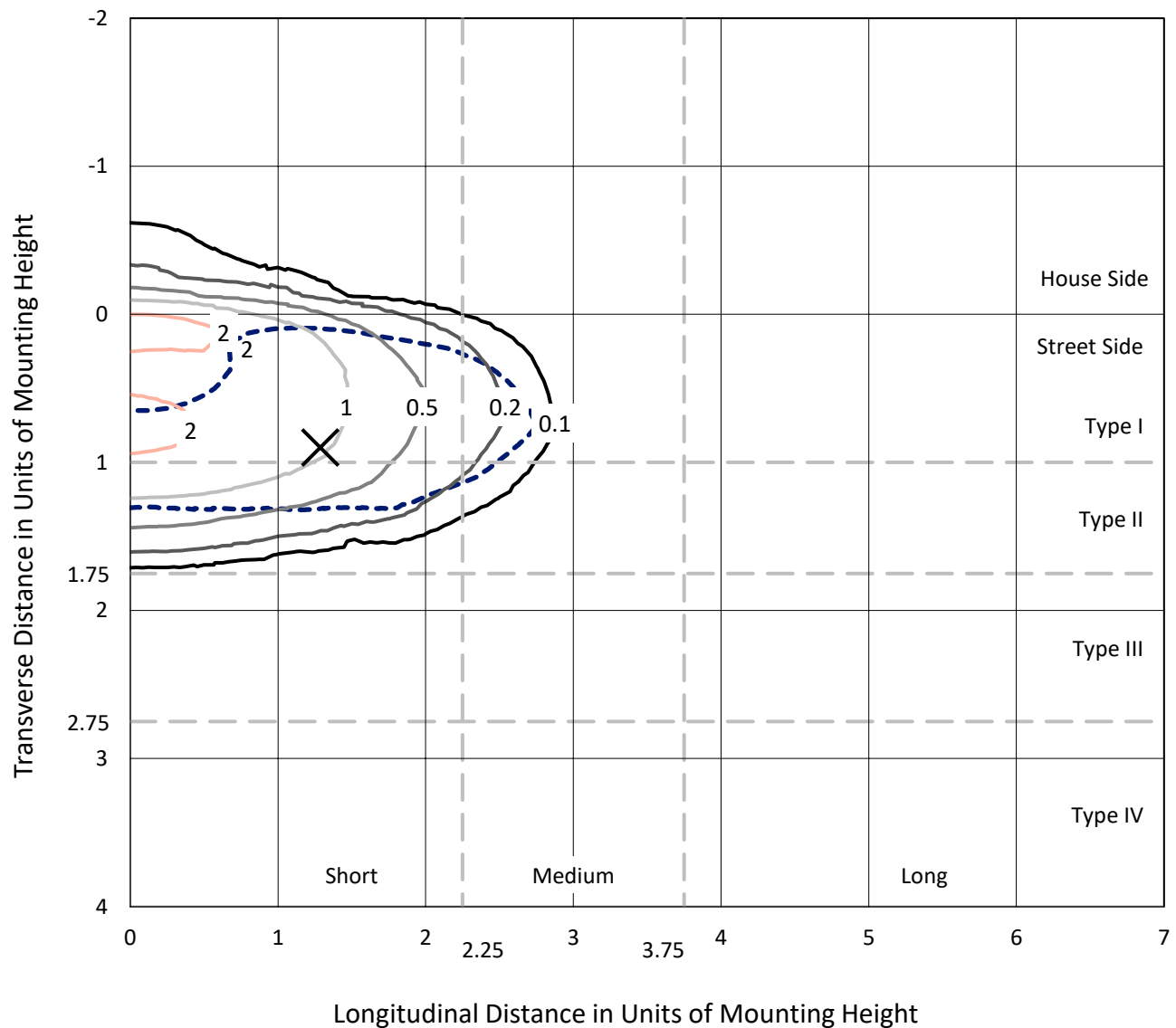


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Iso-Footcandle Lines of Horizontal Illumination

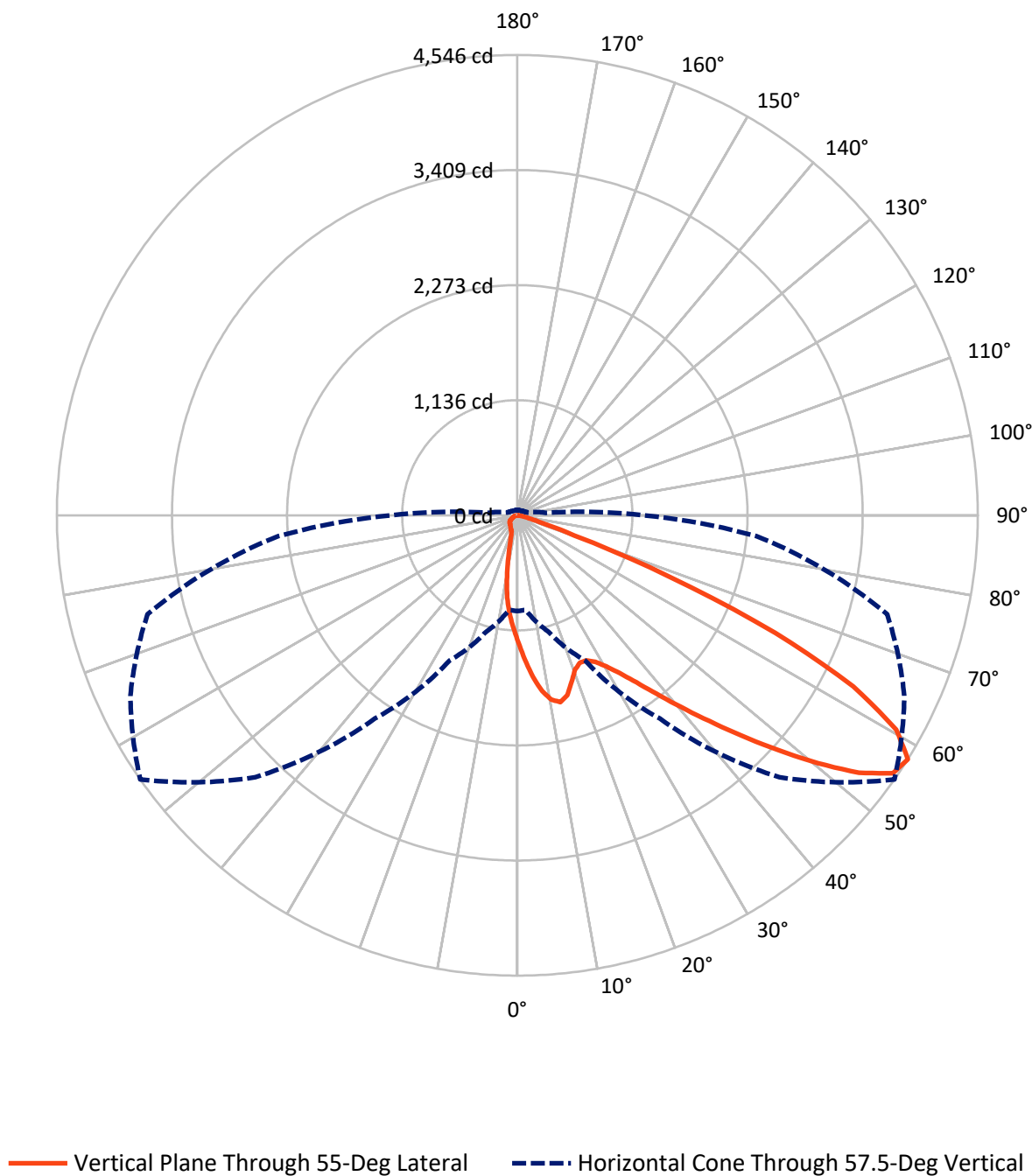
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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	406.7	0.0	406.7
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	4801.3	0.0	4801.3
	% Fixture	92.2	0.0	92.2
Total	Lumens	5208.0	0.0	5208.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	2.2
10°-20°	282.1	5.4
20°-30°	451.3	8.7
30°-40°	763.8	14.7
40°-50°	1254.1	24.1
50°-60°	1378.3	26.5
60°-70°	790.6	15.2
70°-80°	161.5	3.1
80°-90°	9.5	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°	5208.0	100.0
0°-180°	5208.0	100.0

Coefficient of Utilization



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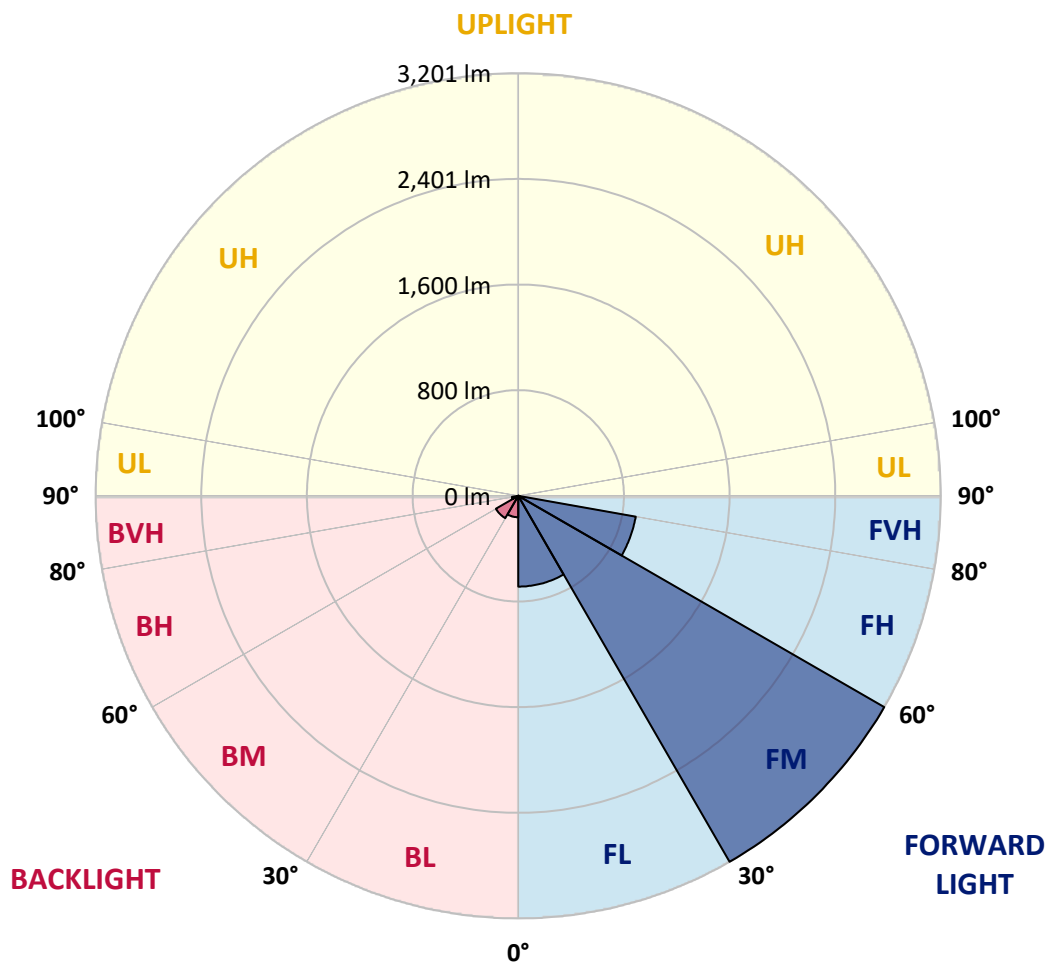
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	687.8	13.2			
FM	(30°-60°)	3200.9	61.5			
FH	(60°-80°)	903.8	17.4			G1/1800
FVH	(80°-90°)	8.9	0.2			G0/10
BL	(0°-30°)	162.4	3.1	B1/500		
BM	(30°-60°)	195.3	3.8	B0/220		
BH	(60°-80°)	48.4	0.9	B0/110		G0/110
BVH	(80°-90°)	0.6	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°	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0
2.5°	1557.2	1537.6	1534.7	1530.8	1493.6	1465.6	1425.2	1380.9	1331.1	1280.3	1257.9
5°	1799.0	1783.6	1780.7	1762.7	1720.4	1672.8	1600.8	1510.0	1417.2	1308.0	1261.1
7.5°	1845.9	1843.1	1856.2	1855.6	1849.7	1812.2	1751.5	1643.3	1503.9	1342.0	1269.5
10°	1636.8	1644.2	1683.4	1717.8	1810.6	1864.5	1851.4	1762.1	1593.2	1380.9	1278.8
12.5°	1446.4	1437.8	1465.6	1504.5	1612.4	1773.0	1892.8	1861.3	1695.2	1424.9	1292.6
15°	1327.0	1323.4	1339.2	1357.1	1439.3	1601.2	1844.6	1942.0	1793.5	1476.9	1313.4
17.5°	1288.7	1285.9	1290.7	1295.2	1348.5	1473.7	1730.0	1991.4	1887.6	1536.4	1336.6
20°	1319.9	1316.0	1315.4	1311.9	1334.0	1419.4	1626.3	1995.0	1972.1	1590.3	1356.5
22.5°	1410.7	1406.3	1390.5	1376.4	1378.3	1426.8	1580.0	1959.6	2035.6	1640.7	1369.0
25°	1575.5	1568.1	1535.3	1487.8	1457.7	1478.2	1587.1	1913.1	2096.4	1680.2	1362.9
27.5°	1781.7	1772.0	1730.0	1659.3	1590.3	1565.2	1638.2	1880.9	2146.8	1710.4	1349.7
30°	1983.7	1971.2	1929.7	1874.8	1774.0	1694.9	1730.3	1895.0	2206.8	1741.9	1332.4
32.5°	2201.7	2189.8	2135.0	2066.8	1983.4	1877.1	1856.5	1964.1	2280.4	1785.9	1320.2
35°	2477.5	2459.0	2380.9	2288.1	2199.4	2091.9	2027.3	2083.2	2378.3	1853.0	1327.0
37.5°	2791.7	2766.6	2682.4	2554.3	2438.7	2318.2	2235.4	2247.0	2521.9	1942.9	1347.8
40°	3087.7	3065.0	2987.3	2866.5	2721.3	2575.2	2486.9	2461.2	2720.0	2052.4	1384.5
42.5°	3265.3	3244.7	3212.0	3161.0	3038.6	2889.6	2778.2	2722.6	2954.5	2183.5	1429.1
45°	3275.3	3257.3	3301.3	3360.7	3336.6	3237.4	3101.5	2999.8	3189.9	2306.5	1475.3
47.5°	3116.0	3103.8	3237.4	3444.8	3548.2	3590.0	3464.7	3253.8	3384.1	2394.7	1494.2
50°	2681.8	2677.3	2952.2	3333.1	3628.8	3898.9	3847.8	3490.1	3534.7	2440.3	1476.3
52.5°	2325.3	2309.0	2469.2	2975.4	3511.6	4061.5	4222.3	3722.0	3640.1	2449.0	1434.2
55°	1763.7	1749.3	1950.3	2376.8	3133.6	4003.6	4496.3	3961.2	3715.5	2426.8	1358.7
57.5°	946.1	937.1	1191.0	1581.9	2449.6	3656.8	4545.7	4214.3	3779.2	2368.1	1253.1
60°	368.4	366.7	461.8	767.5	1488.8	2975.1	4296.2	4366.2	3818.9	2295.8	1164.8
62.5°	222.8	227.7	243.1	344.6	657.6	1848.2	3721.1	4193.4	3845.6	2229.7	1091.8
65°	184.3	184.7	186.5	236.7	315.1	773.3	2801.3	3625.0	3779.8	2111.8	988.5
67.5°	158.0	160.9	168.3	187.9	222.2	339.2	1612.7	2808.0	3379.3	1837.5	827.3
70°	124.6	128.4	137.8	154.5	171.5	212.3	596.0	1868.4	2581.7	1385.1	625.6
72.5°	105.1	104.7	109.5	125.6	136.1	149.3	229.3	1046.9	1500.4	661.2	309.5
75°	81.3	84.5	90.6	105.1	111.4	108.2	124.2	382.4	537.6	200.4	105.4
77.5°	63.6	66.1	71.6	85.8	92.1	76.8	71.6	136.8	172.8	72.0	47.6
80°	28.6	30.9	48.8	63.2	75.1	53.0	38.8	70.0	76.8	32.8	24.1
82.5°	5.1	8.7	28.6	33.4	38.5	34.3	20.2	36.3	37.6	13.1	8.3
85°	0.3	0.6	9.9	12.2	15.4	11.3	6.1	14.5	12.5	4.5	3.2
87.5°	0.0	0.0	0.0	0.3	0.3	1.6	1.9	2.6	1.9	1.6	1.3
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°	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0	1255.0
2.5°	1234.8	1189.2	1144.8	1108.5	1087.4	1051.4	1027.7	1023.8	1013.8	1022.5
5°	1211.0	1129.4	1046.9	973.0	912.4	834.0	775.5	750.8	729.3	736.7
7.5°	1199.8	1071.0	942.6	816.3	686.5	561.4	468.2	429.4	399.9	404.0
10°	1184.7	1010.3	808.9	616.2	442.5	318.9	254.7	230.9	217.7	218.0
12.5°	1173.1	937.8	653.8	417.8	269.5	203.6	183.7	177.9	174.0	174.4
15°	1167.4	852.3	500.6	278.4	192.7	172.4	167.6	165.0	162.5	162.2
17.5°	1157.7	757.3	366.4	203.3	168.6	161.5	157.3	154.5	151.3	150.6
20°	1143.3	649.3	267.8	171.8	158.0	152.5	146.8	142.9	139.1	138.4
22.5°	1116.6	535.4	205.8	159.0	150.3	144.2	137.1	132.6	128.7	128.1
25°	1067.1	428.3	173.4	151.0	143.5	136.1	128.4	122.4	118.8	118.2
27.5°	1004.5	336.5	157.3	143.5	134.9	128.1	119.4	113.7	110.5	109.9
30°	930.7	259.1	148.0	135.2	124.6	118.8	111.1	106.3	104.3	104.3
32.5°	851.1	207.2	144.2	126.9	115.6	109.2	103.1	101.2	100.6	100.2
35°	776.2	179.9	142.3	120.1	107.6	101.5	98.9	99.2	100.6	100.6
37.5°	709.7	171.2	141.3	115.3	100.6	95.0	96.7	99.5	98.3	98.3
40°	649.6	172.1	140.6	111.7	94.7	91.5	94.7	92.5	89.3	89.0
42.5°	603.7	180.2	139.4	108.9	91.2	89.0	87.6	84.2	83.8	84.5
45°	570.3	187.3	139.1	107.6	87.3	83.1	81.6	78.0	84.5	86.1
47.5°	530.8	187.3	139.1	103.1	81.0	79.3	76.8	72.9	79.3	81.0
50°	479.8	175.4	133.6	98.0	75.7	74.8	70.3	65.5	64.3	65.2
52.5°	415.2	153.9	119.8	90.9	70.6	68.7	63.2	59.8	58.7	58.7
55°	341.7	128.7	101.2	80.6	65.2	61.7	57.8	56.2	55.2	54.6
57.5°	277.8	105.7	81.3	71.6	60.1	55.6	54.2	52.4	50.7	49.8
60°	228.0	83.1	67.1	63.6	54.9	50.7	50.4	47.9	43.7	43.0
62.5°	176.0	61.0	56.5	55.2	49.8	46.2	45.6	40.5	34.0	32.8
65°	124.2	47.6	45.6	48.5	44.3	41.1	39.5	31.8	25.0	24.1
67.5°	87.3	39.8	36.0	42.4	38.5	34.3	33.4	27.0	20.9	20.2
70°	62.3	32.4	29.5	36.3	30.9	30.2	28.3	22.4	17.0	16.4
72.5°	44.0	24.7	22.8	31.5	21.2	26.0	23.2	17.3	12.8	12.2
75°	32.4	17.6	16.1	18.3	15.4	19.6	16.4	11.6	8.0	7.7
77.5°	23.8	11.3	9.6	9.0	9.0	12.2	9.0	4.8	3.5	3.2
80°	16.7	5.1	4.5	3.9	3.5	2.9	1.3	0.6	0.3	0.3
82.5°	9.9	2.3	2.3	1.6	0.9	0.0	0.0	0.0	0.0	0.0
85°	2.3	0.9	0.9	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)