

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: P959825

Luminaire Tested: **NAV-SB1B-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

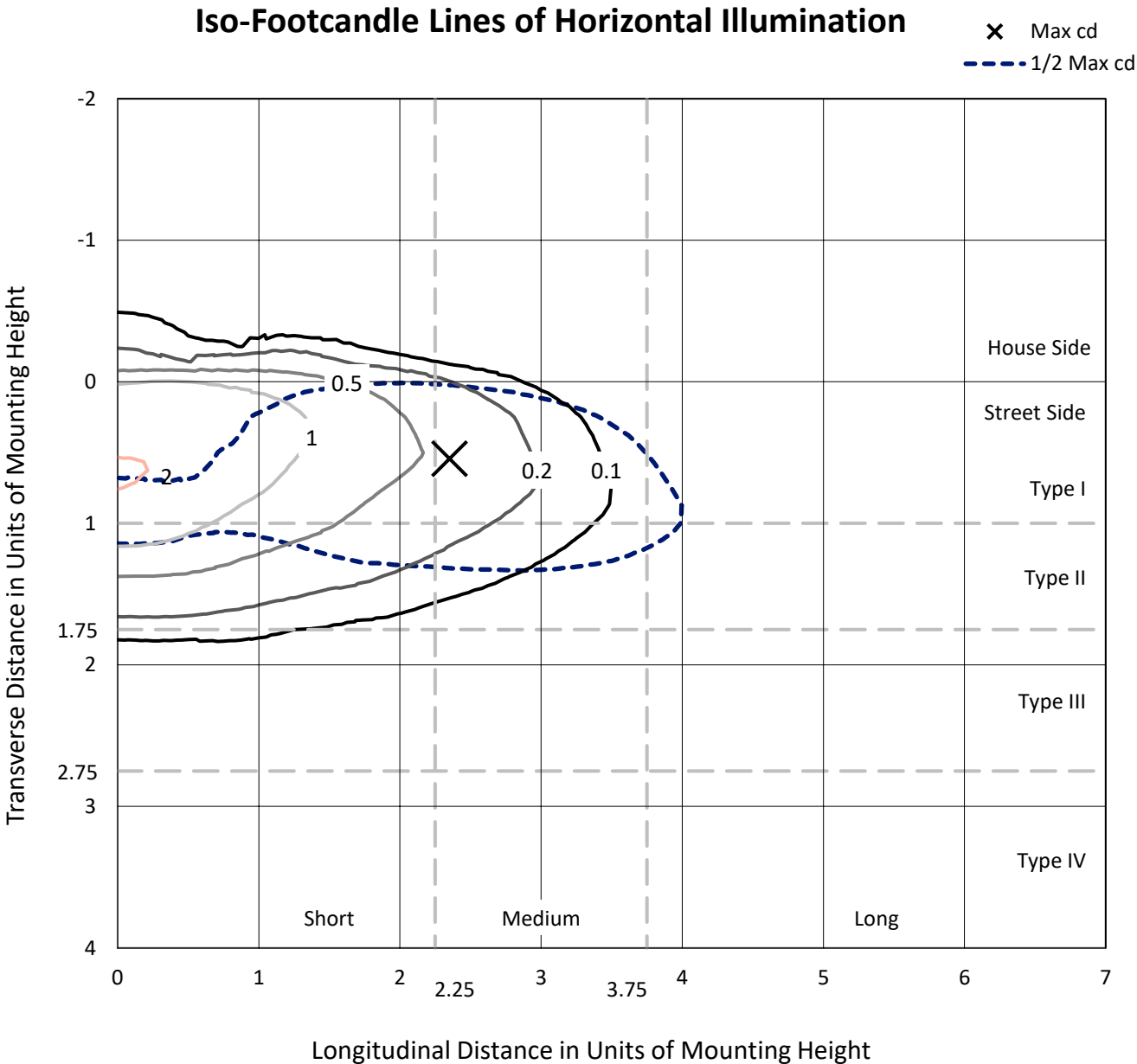
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4888.2 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - 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



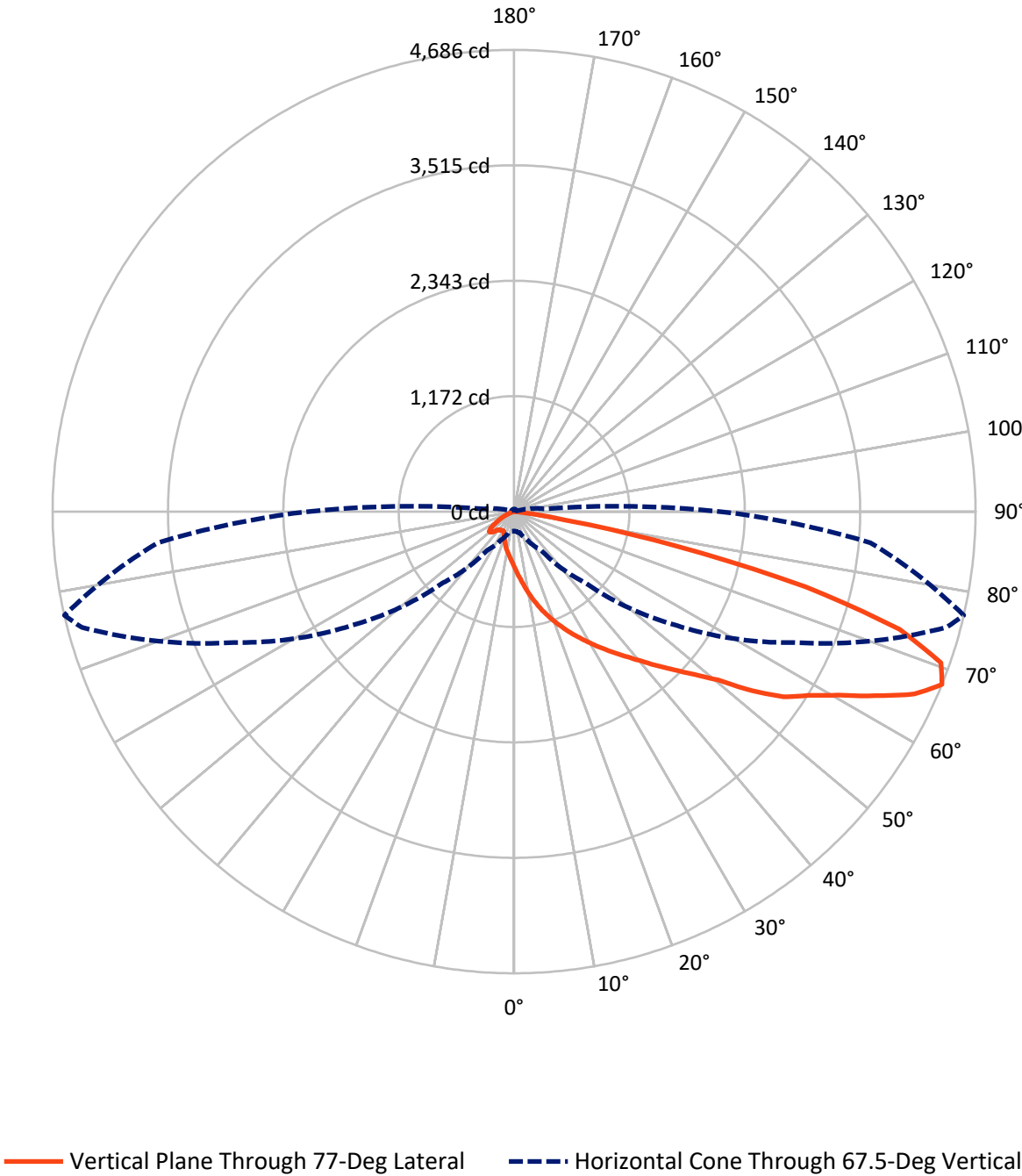
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Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	359.6	0.0	359.6
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	4528.6	0.0	4528.6
	% Fixture	92.6	0.0	92.6
Total	Lumens	4888.2	0.0	4888.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	1.2
10°-20°	201.5	4.1
20°-30°	388.8	8.0
30°-40°	675.0	13.8
40°-50°	980.0	20.0
50°-60°	1125.4	23.0
60°-70°	977.1	20.0
70°-80°	460.2	9.4
80°-90°	22.8	0.5
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°	4888.2	100.0
0°-180°	4888.2	100.0

Coefficient of Utilization



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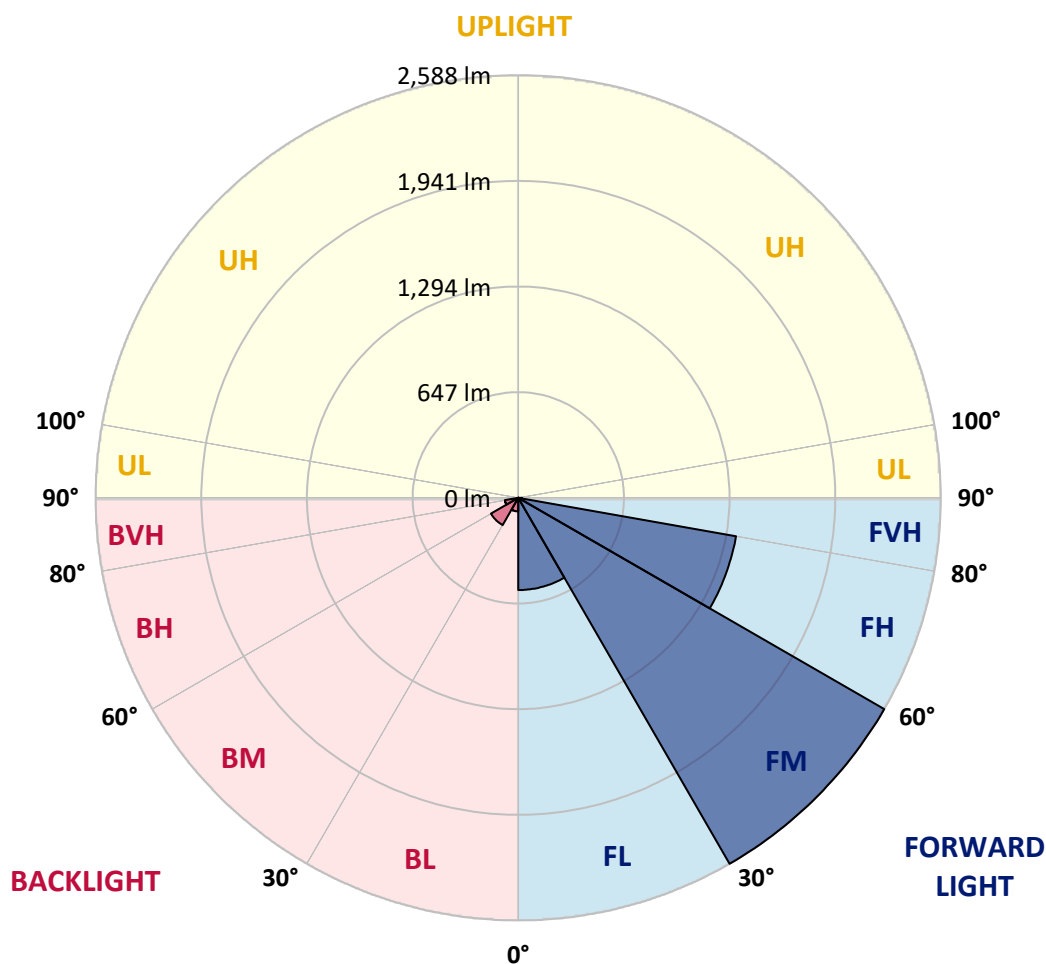
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	564.5	11.5			
FM	(30°-60°)	2587.7	52.9			
FH	(60°-80°)	1354.0	27.7			G1/1800
FVH	(80°-90°)	22.3	0.5			G1/100
BL	(0°-30°)	83.3	1.7	B0/110		
BM	(30°-60°)	192.7	3.9	B0/220		
BH	(60°-80°)	83.3	1.7	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	780.4	785.3	778.3	765.0	744.9	731.8	700.0	669.9	636.5	625.9	592.6
5°	951.3	955.6	947.7	933.1	906.4	880.9	839.0	776.1	710.9	689.9	630.8
7.5°	1077.9	1080.4	1077.3	1063.9	1038.4	1009.6	962.9	888.5	791.6	768.5	677.8
10°	1168.9	1176.8	1176.0	1170.8	1153.7	1130.4	1080.7	995.9	882.1	852.4	730.9
12.5°	1229.4	1238.2	1243.3	1254.9	1254.0	1239.1	1195.4	1105.8	972.2	937.4	790.8
15°	1247.0	1256.3	1276.1	1302.8	1326.5	1334.0	1303.4	1213.6	1071.5	1026.8	852.1
17.5°	1237.0	1251.5	1275.2	1317.4	1369.3	1403.6	1400.3	1317.7	1161.6	1110.7	912.1
20°	1259.1	1273.0	1291.6	1327.1	1387.5	1449.8	1474.7	1417.3	1251.2	1197.8	975.3
22.5°	1381.7	1379.3	1381.1	1386.9	1423.0	1484.6	1536.0	1507.7	1339.9	1285.2	1042.1
25°	1576.0	1565.1	1546.5	1515.3	1506.2	1536.0	1589.4	1587.8	1433.4	1374.7	1110.4
27.5°	1798.8	1797.0	1753.6	1678.3	1635.8	1624.3	1649.7	1665.8	1525.9	1463.4	1179.0
30°	2012.2	2017.1	1958.5	1874.7	1796.7	1751.4	1728.4	1739.9	1620.0	1559.0	1249.7
32.5°	2198.0	2203.1	2139.4	2041.4	1944.8	1890.2	1841.6	1813.1	1722.6	1656.2	1327.4
35°	2354.9	2360.1	2286.9	2178.5	2075.6	2026.1	1971.2	1893.2	1825.8	1763.9	1413.9
37.5°	2495.2	2493.6	2395.6	2286.3	2185.2	2146.0	2117.2	1991.9	1932.0	1872.3	1509.8
40°	2578.0	2584.4	2500.6	2380.0	2282.1	2253.6	2251.7	2114.2	2054.7	1996.7	1614.9
42.5°	2602.3	2613.5	2552.9	2453.8	2364.9	2333.9	2381.6	2246.5	2197.4	2140.9	1733.6
45°	2558.6	2569.5	2541.9	2473.3	2421.4	2401.4	2493.3	2383.7	2349.7	2293.8	1867.4
47.5°	2431.1	2444.7	2451.4	2436.8	2436.2	2456.6	2593.5	2528.3	2530.6	2473.6	2022.5
50°	2184.3	2207.3	2268.7	2320.3	2400.1	2500.3	2690.9	2684.9	2734.6	2685.5	2224.7
52.5°	1735.6	1768.4	1979.7	2120.8	2300.3	2492.1	2798.0	2936.2	3092.5	3020.6	2509.7
55°	1394.8	1394.8	1566.6	1830.6	2105.4	2438.1	2844.8	3099.5	3336.3	3319.3	2710.4
57.5°	1137.0	1150.8	1260.3	1493.7	1823.4	2309.3	2873.7	3202.1	3532.7	3520.3	2906.5
60°	701.8	731.2	938.3	1168.6	1502.5	2080.2	2855.4	3305.9	3771.0	3780.9	3142.6
62.5°	395.2	406.1	498.5	840.8	1168.4	1772.1	2716.1	3363.8	4075.7	4118.2	3386.1
65°	272.9	278.4	313.9	523.3	809.9	1410.9	2443.8	3327.8	4381.1	4467.0	3592.4
67.5°	198.2	200.9	223.1	319.6	480.5	1023.0	2017.1	3145.6	4542.9	4686.4	3631.9
70°	152.4	154.2	170.3	210.0	283.8	631.4	1464.9	2783.5	4425.7	4597.2	3429.8
72.5°	123.8	125.7	138.1	155.4	188.2	373.4	887.9	2260.5	3908.4	4093.6	2919.8
75°	104.4	106.8	118.1	129.4	147.5	239.8	416.5	1574.2	2939.2	3060.6	2030.4
77.5°	58.0	53.4	95.9	107.1	124.4	151.8	194.9	926.4	1646.2	1679.9	900.9
80°	36.1	37.3	76.2	86.2	95.6	76.5	89.3	356.7	570.6	542.1	174.6
82.5°	2.2	4.8	58.6	62.2	65.6	32.8	33.7	121.2	137.6	126.3	31.0
85°	0.0	0.0	26.8	21.5	22.8	9.4	9.7	28.2	18.6	20.0	6.0
87.5°	0.0	0.0	0.0	0.6	0.0	0.9	1.8	2.5	0.9	1.2	2.2
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°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6
2.5°	571.2	550.0	507.0	464.7	430.4	398.5	375.8	354.2	343.3	342.7	342.1
5°	588.6	544.0	457.8	381.6	320.2	271.1	239.2	216.4	204.9	200.9	200.4
7.5°	612.8	545.8	414.6	308.7	236.5	194.2	176.1	168.8	166.4	163.6	163.0
10°	643.5	550.0	376.1	248.6	186.3	165.1	157.8	154.8	153.0	151.2	150.6
12.5°	677.8	554.0	337.8	206.4	163.9	153.0	147.8	144.2	141.8	139.6	139.0
15°	711.2	556.4	298.1	177.0	152.4	143.6	138.1	134.2	130.8	128.4	128.1
17.5°	744.3	559.8	260.8	159.4	143.0	134.2	128.7	123.8	121.2	118.4	118.1
20°	781.0	559.1	225.5	146.9	133.6	124.7	119.0	114.4	111.7	108.6	108.3
22.5°	815.0	556.1	194.5	136.3	123.8	115.3	109.0	104.4	101.7	99.2	98.9
25°	854.1	553.7	168.8	126.6	114.7	106.2	99.2	95.0	91.9	89.9	89.6
27.5°	891.9	550.0	150.0	117.8	106.0	97.8	91.0	86.2	83.4	82.0	82.0
30°	928.9	549.1	143.0	109.3	98.1	89.9	83.1	78.6	76.5	75.8	75.5
32.5°	973.4	551.6	146.0	106.2	90.7	82.6	76.2	72.9	70.7	70.7	70.7
35°	1021.1	550.9	150.6	109.0	85.9	75.2	70.4	68.3	66.2	66.2	66.2
37.5°	1081.0	551.9	154.2	113.6	84.0	69.2	66.5	63.8	62.5	62.5	62.5
40°	1170.1	581.9	152.4	117.5	83.4	65.0	59.4	58.6	57.7	57.7	57.7
42.5°	1279.4	647.2	154.8	117.8	83.1	61.9	54.6	56.5	54.3	54.0	53.7
45°	1399.0	718.5	170.3	111.4	82.8	60.4	52.2	54.3	51.0	51.0	51.0
47.5°	1517.7	789.2	186.0	102.3	82.0	60.1	50.1	48.9	48.0	48.3	48.3
50°	1681.3	846.9	192.2	89.9	79.8	59.4	46.1	46.4	45.8	46.4	46.4
52.5°	1859.6	859.1	184.9	75.8	73.8	57.7	43.4	44.6	44.3	44.9	44.9
55°	1970.7	845.9	152.7	63.1	64.4	50.4	40.7	43.2	43.2	43.2	43.2
57.5°	2085.4	790.5	108.3	51.2	53.4	41.3	38.2	41.6	41.3	41.0	41.0
60°	2167.9	700.6	71.3	42.2	42.5	34.0	35.5	39.2	38.8	37.3	37.3
62.5°	2229.6	601.4	45.8	35.8	32.5	30.6	32.5	35.5	34.3	31.0	30.3
65°	2222.6	463.8	35.3	30.6	26.8	26.8	28.2	31.0	27.4	21.8	21.2
67.5°	2092.9	313.9	29.1	25.8	22.4	22.1	23.4	25.8	23.4	18.6	17.9
70°	1861.3	205.2	23.4	20.0	17.9	16.4	18.9	22.1	19.7	14.9	14.2
72.5°	1510.7	125.0	17.6	14.6	13.0	10.7	14.9	18.2	15.8	11.0	10.4
75°	977.4	63.8	12.1	9.4	7.0	6.4	11.0	13.6	11.0	6.7	5.7
77.5°	373.9	26.8	6.7	4.2	3.7	3.1	6.0	8.2	4.5	1.5	1.2
80°	72.0	11.3	3.4	2.2	1.8	1.2	0.9	0.6	0.0	0.0	0.0
82.5°	12.4	3.7	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	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)