

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: P959445

Luminaire Tested: **NAV-SB1A-830-U-SL4-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

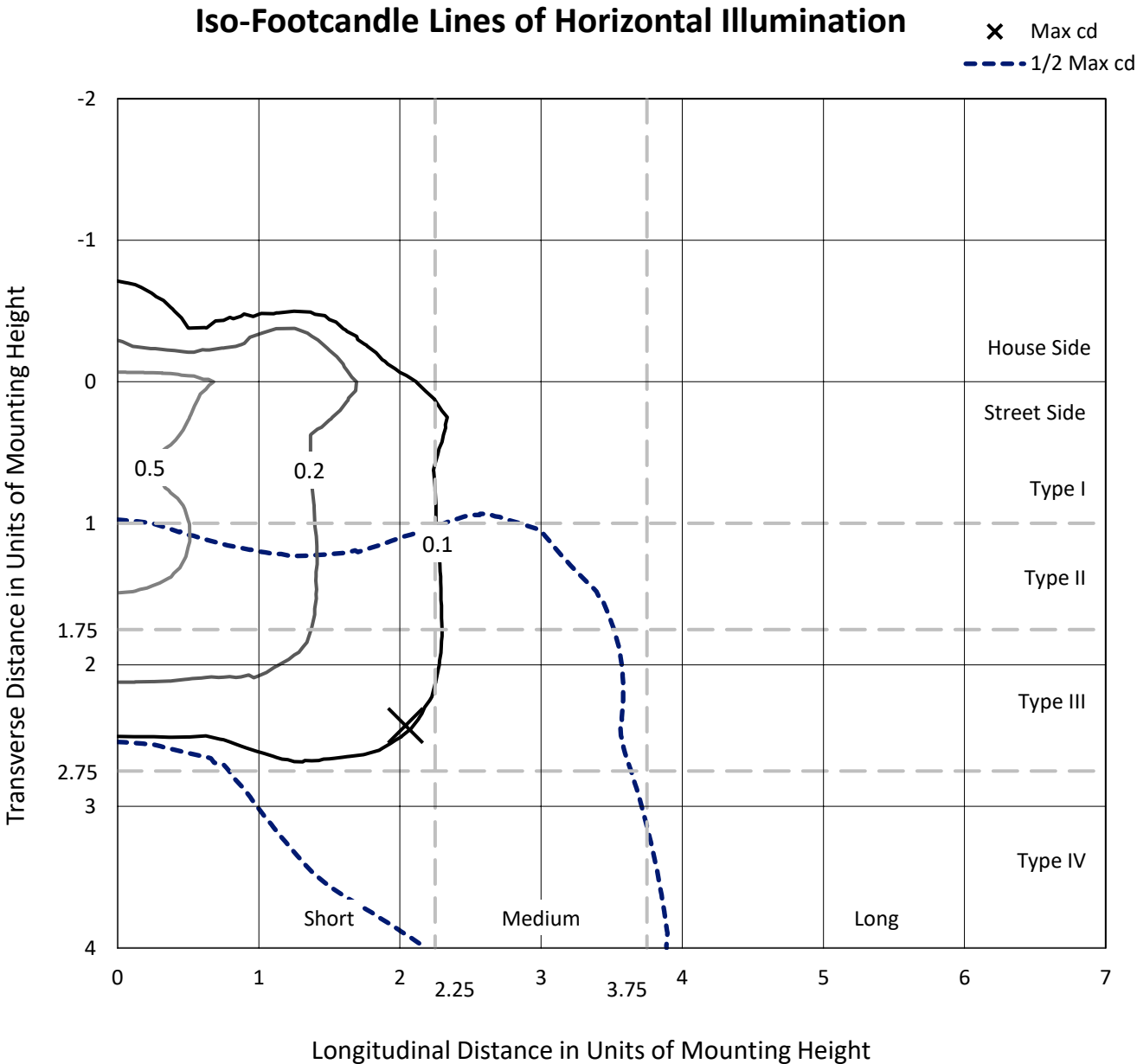
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2885.4 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - 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



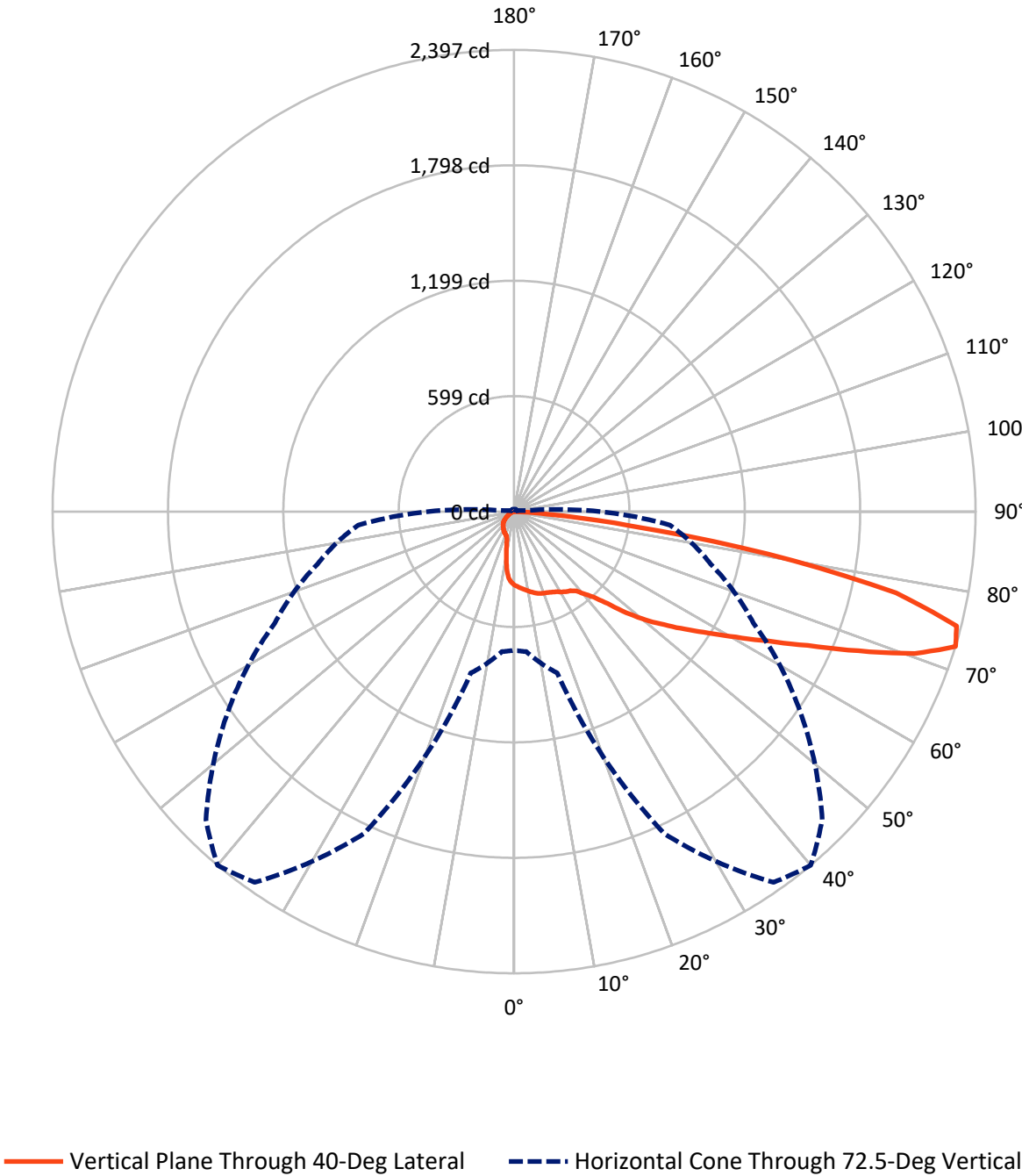
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Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	372.6	0.0	372.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2512.8	0.0	2512.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	2885.4	0.0	2885.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	1.2
10°-20°	94.8	3.3
20°-30°	153.3	5.3
30°-40°	226.3	7.8
40°-50°	381.0	13.2
50°-60°	591.5	20.5
60°-70°	740.2	25.7
70°-80°	606.0	21.0
80°-90°	57.5	2.0
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°	2885.4	100.0
0°-180°	2885.4	100.0

Coefficient of Utilization



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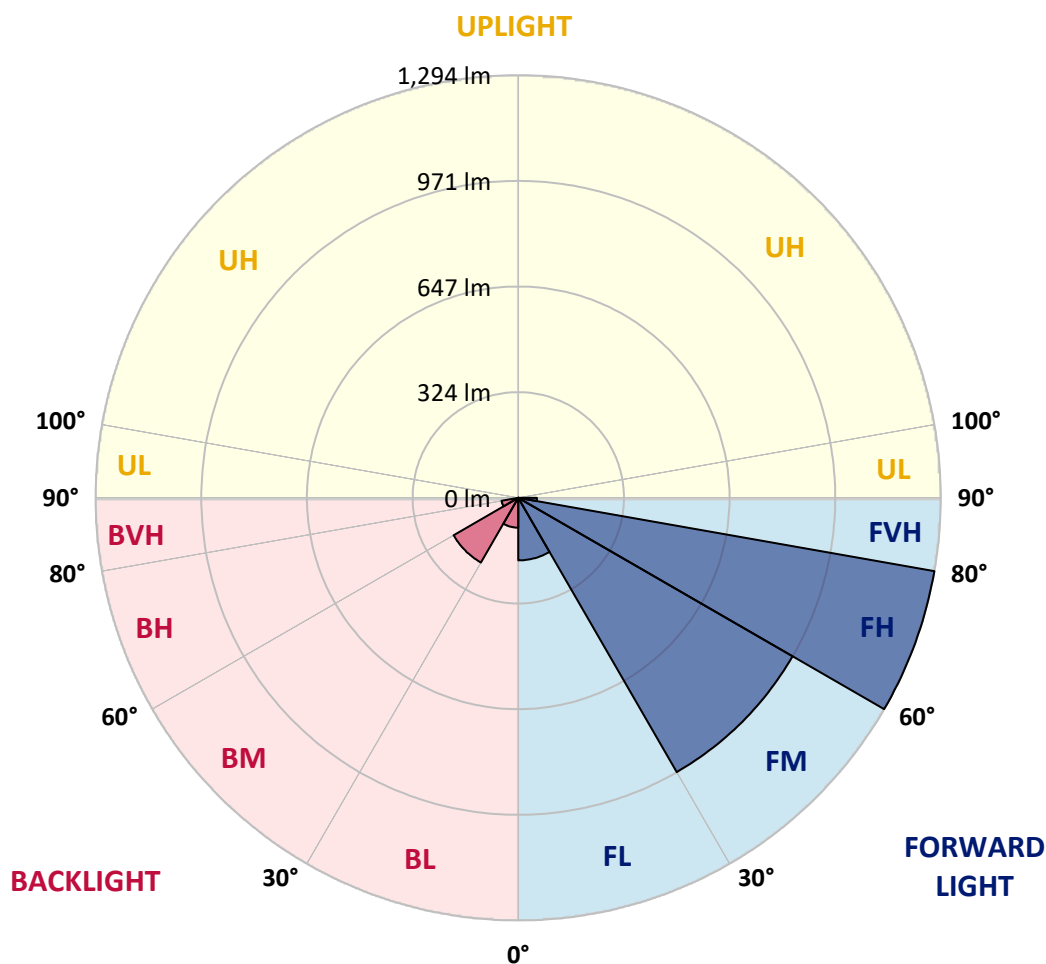
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	191.5	6.6			
FM	(30°-60°)	970.0	33.6			
FH	(60°-80°)	1294.2	44.9			G1/1800
FVH	(80°-90°)	57.0	2.0			G1/100
BL	(0°-30°)	91.5	3.2	B0/110		
BM	(30°-60°)	228.8	7.9	B1/1000		
BH	(60°-80°)	51.9	1.8	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: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0
2.5°	393.6	395.0	394.2	392.5	392.1	391.1	390.1	389.6	388.2	386.8	385.3
5°	404.7	406.2	405.1	402.7	401.6	400.6	399.0	397.7	394.6	391.9	388.4
7.5°	416.9	418.1	416.9	413.4	411.6	410.3	408.2	406.2	402.7	398.5	394.2
10°	430.3	431.4	429.4	424.9	422.0	420.0	418.1	415.9	412.7	408.2	402.9
12.5°	442.9	444.2	441.2	435.7	432.4	430.5	428.3	426.6	423.3	419.0	413.6
15°	454.4	456.3	451.2	445.3	441.6	440.0	437.9	436.9	434.6	431.6	426.6
17.5°	463.1	464.4	459.0	452.0	447.9	446.8	445.3	446.0	445.5	444.0	440.7
20°	470.5	471.4	464.2	455.7	451.2	451.4	450.9	453.2	454.0	454.0	453.8
22.5°	479.6	479.8	470.7	460.0	454.6	456.1	456.8	459.2	460.9	462.7	466.6
25°	491.6	491.2	480.3	465.8	460.9	463.1	464.6	465.5	467.5	470.3	479.2
27.5°	509.4	508.1	494.2	474.9	469.1	471.2	474.0	473.6	472.6	474.9	489.8
30°	532.0	530.2	511.8	487.7	482.5	484.2	485.0	481.1	474.9	476.8	499.2
32.5°	567.8	564.8	539.2	502.0	493.9	495.9	494.9	486.8	477.4	479.4	508.5
35°	630.3	622.8	586.5	532.0	507.0	504.8	502.2	494.4	482.9	480.9	516.4
37.5°	762.8	749.8	687.8	590.5	536.6	522.4	514.3	506.6	488.7	480.9	525.2
40°	912.4	899.0	827.6	688.3	585.7	561.8	542.6	520.9	494.9	483.8	539.2
42.5°	1068.4	1053.8	980.3	809.5	655.9	606.8	571.1	532.4	504.8	492.4	557.6
45°	1242.6	1224.4	1128.3	936.0	757.8	681.5	616.9	556.2	522.2	507.9	582.8
47.5°	1426.5	1402.8	1275.9	1058.8	867.6	784.9	700.9	598.5	547.9	530.9	616.9
50°	1589.5	1566.0	1428.2	1187.3	970.2	883.4	796.4	657.1	586.3	563.5	662.9
52.5°	1706.6	1688.8	1566.9	1319.8	1076.9	975.8	883.1	725.4	635.0	605.3	716.9
55°	1785.0	1768.7	1665.1	1445.4	1200.9	1077.5	968.6	799.5	693.7	655.2	776.7
57.5°	1832.7	1823.3	1736.1	1557.5	1323.9	1188.7	1066.4	881.0	762.8	714.1	843.4
60°	1849.6	1842.0	1780.3	1664.5	1472.5	1322.4	1181.3	972.9	846.6	781.0	911.8
62.5°	1804.4	1805.9	1812.0	1791.2	1629.2	1478.9	1319.2	1083.3	939.7	856.9	976.2
65°	1591.6	1604.2	1719.8	1931.5	1836.8	1674.8	1494.6	1218.1	1046.2	943.2	1027.3
67.5°	1317.8	1336.1	1479.9	2013.7	2058.0	1929.4	1738.8	1389.8	1173.1	1030.9	1046.6
70°	1008.8	1028.4	1202.6	1996.5	2265.1	2207.5	2040.9	1608.1	1304.5	1091.8	997.3
72.5°	720.0	730.0	867.4	1843.8	2350.1	2397.1	2263.4	1815.1	1371.8	1058.1	813.4
75°	505.9	504.2	595.2	1484.7	2217.8	2374.0	2185.4	1703.1	1241.4	840.6	501.5
77.5°	220.4	220.8	297.2	901.7	1770.1	2027.6	1816.6	1066.8	865.4	445.5	211.7
80°	57.2	58.9	109.1	359.1	1065.7	1338.2	1107.9	468.9	399.9	108.6	40.4
82.5°	20.2	21.5	50.2	112.7	393.1	613.7	493.3	150.0	104.3	31.1	10.9
85°	5.8	7.0	27.0	34.5	81.3	173.4	119.7	29.1	25.6	16.1	2.9
87.5°	0.0	0.8	5.4	4.8	4.8	3.3	6.0	3.3	4.1	1.9	0.8
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°	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0	382.0
2.5°	384.0	382.5	379.2	375.8	372.5	369.4	368.6	365.3	363.8	364.0	363.8
5°	385.9	383.1	376.8	369.2	361.4	352.5	345.1	334.7	325.7	324.7	324.0
7.5°	391.1	386.6	376.4	361.6	342.0	317.5	294.7	272.0	259.2	252.4	251.8
10°	399.2	393.1	377.5	349.2	307.7	263.8	229.3	200.8	186.2	179.5	178.2
12.5°	408.8	402.0	379.2	328.1	263.4	205.8	168.4	151.1	148.0	147.6	147.3
15°	422.3	414.8	381.2	299.7	215.4	156.7	139.5	139.7	142.2	143.4	143.2
17.5°	437.3	429.9	378.3	265.0	168.0	133.9	133.5	135.4	138.9	140.2	139.9
20°	452.4	445.5	368.4	224.1	135.8	127.6	129.4	131.5	135.0	136.7	136.7
22.5°	468.1	462.1	352.5	180.6	122.6	123.0	125.2	127.3	131.3	133.2	133.2
25°	484.8	479.6	331.4	144.7	117.0	118.2	121.1	123.6	127.8	130.2	130.2
27.5°	501.8	497.8	307.5	120.8	111.7	113.3	116.4	119.9	124.1	126.9	127.1
30°	520.3	518.1	288.3	111.9	106.7	108.0	111.7	115.6	120.1	123.6	124.1
32.5°	539.2	538.7	279.0	118.5	102.1	103.0	106.3	110.2	115.8	120.1	120.6
35°	557.9	558.7	273.6	136.9	100.7	98.2	100.4	103.8	110.6	116.0	117.0
37.5°	581.8	583.9	273.4	156.9	104.3	93.5	95.0	97.4	103.2	109.6	110.6
40°	617.4	628.9	287.3	174.0	110.8	89.1	89.6	90.0	93.0	98.2	99.9
42.5°	664.8	698.4	337.5	185.8	113.5	85.2	83.6	81.3	80.9	83.6	85.2
45°	723.6	782.6	425.7	192.3	110.8	80.9	76.7	70.4	68.1	70.0	70.0
47.5°	793.0	874.7	530.2	193.8	106.5	75.4	68.1	59.8	57.8	58.4	58.2
50°	860.6	943.8	622.2	181.2	99.3	68.5	58.4	51.5	50.2	50.4	50.4
52.5°	920.3	967.5	648.3	151.5	89.8	60.0	50.2	45.4	44.6	44.6	44.4
55°	959.9	941.9	578.1	115.8	77.8	51.2	43.0	40.6	40.2	40.0	39.6
57.5°	968.1	858.4	436.5	83.6	60.9	43.3	38.2	36.9	36.1	35.2	34.7
60°	938.6	719.3	278.0	58.4	45.6	36.9	33.9	33.0	31.3	29.5	28.9
62.5°	874.7	543.2	153.9	40.6	36.7	31.5	30.0	28.9	25.6	22.9	21.9
65°	788.8	361.2	68.1	31.8	30.0	26.5	25.6	24.1	20.2	16.9	16.3
67.5°	702.6	208.0	30.6	25.4	24.1	21.7	21.1	20.0	17.1	14.1	13.7
70°	604.1	105.4	21.1	20.2	18.7	16.5	17.1	16.9	14.1	11.5	11.1
72.5°	449.9	52.4	15.9	15.2	13.4	11.7	14.1	13.9	11.1	8.7	8.3
75°	254.7	25.8	11.5	10.7	8.0	8.7	11.3	10.7	7.6	5.6	5.2
77.5°	101.1	13.2	7.6	6.6	4.8	5.8	8.3	7.2	3.9	2.4	2.2
80°	23.3	6.6	3.9	2.9	2.2	3.5	4.3	2.6	1.1	0.2	0.0
82.5°	6.6	2.9	1.3	1.1	1.1	1.3	1.1	0.4	0.0	0.0	0.0
85°	2.2	1.3	0.4	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	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)