

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: P960512

Luminaire Tested: **NAV-SB1C-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5411 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 54.4
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

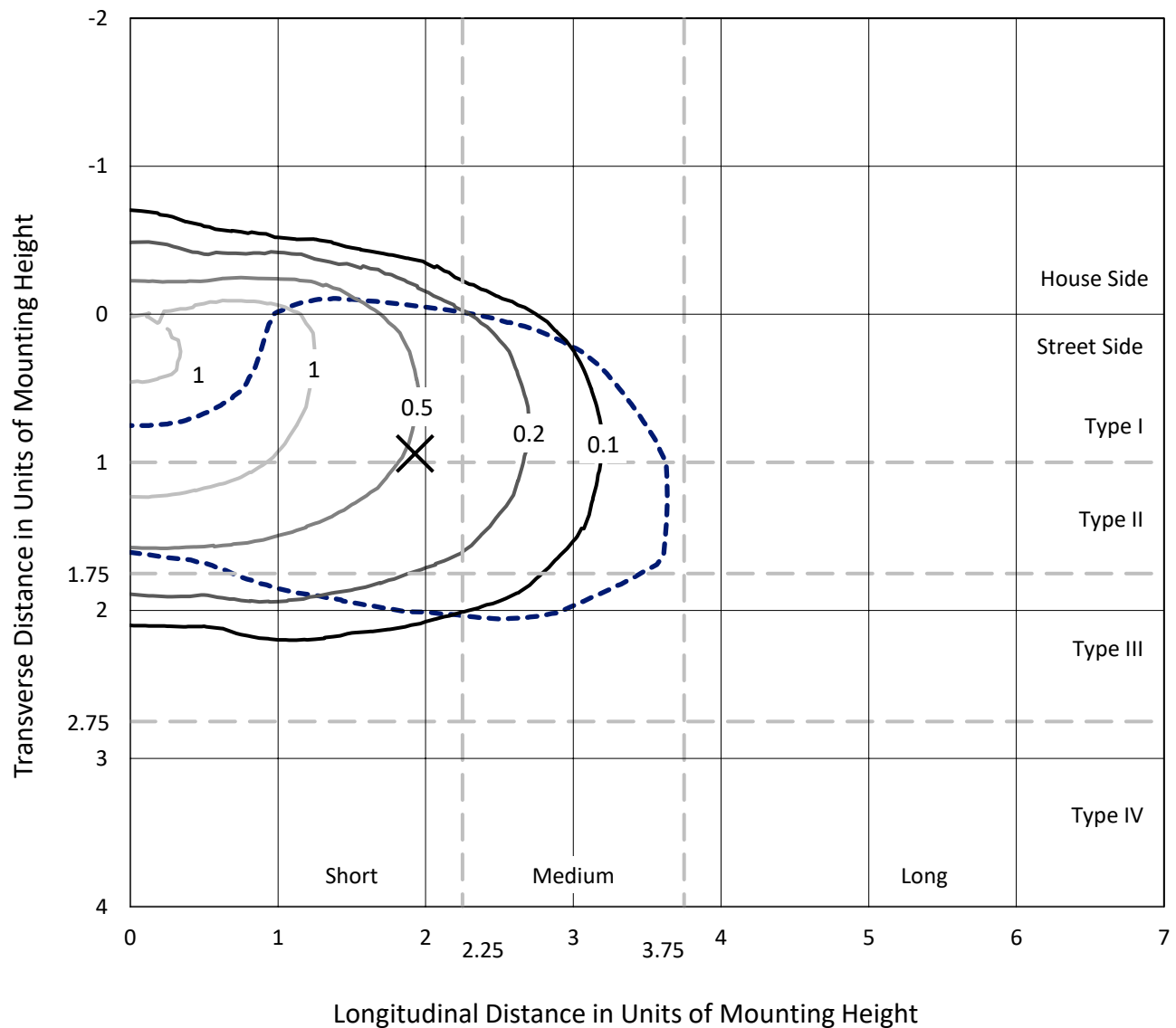


REPORT NUMBER: P960512

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

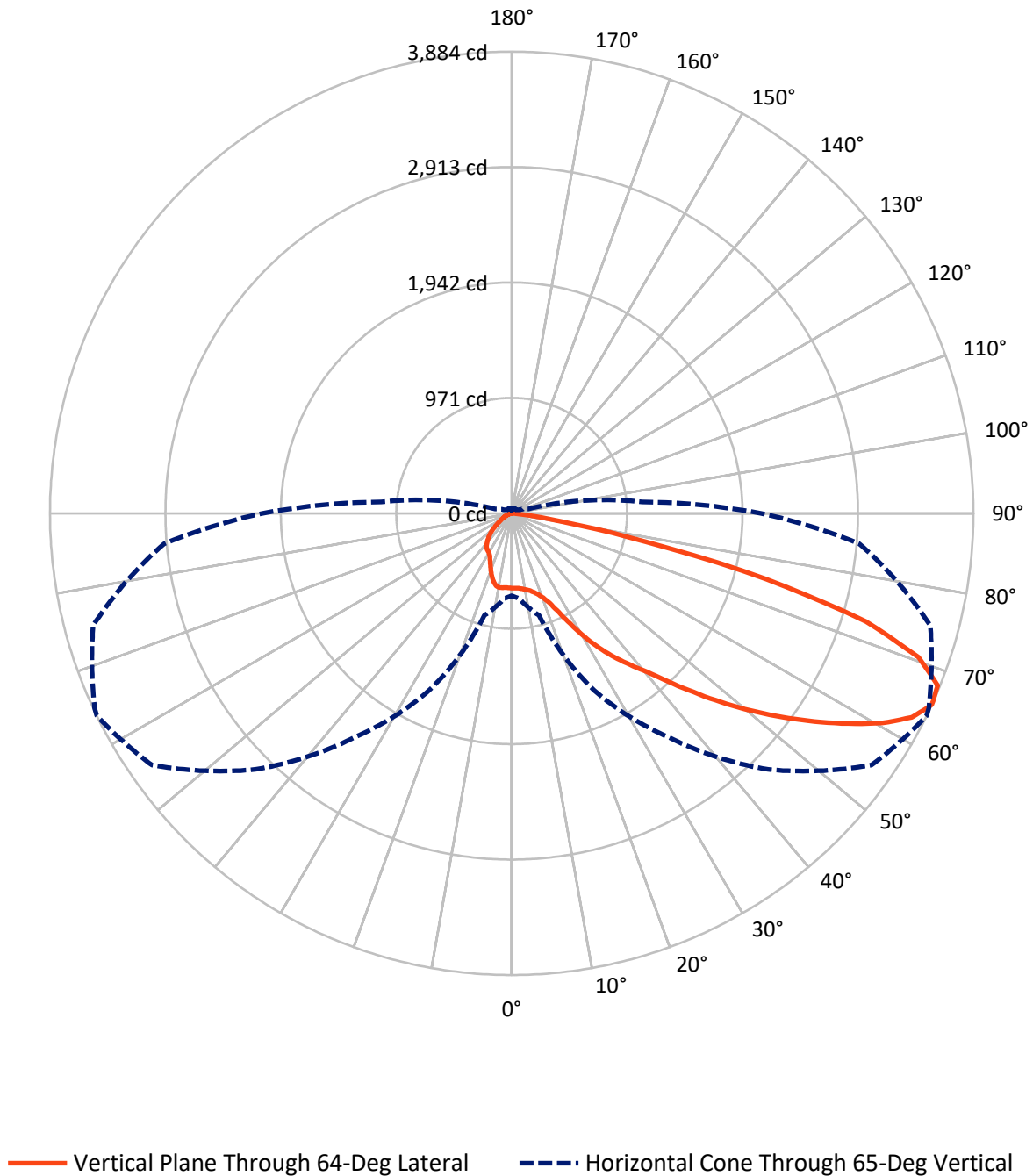
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type III - Short - N/A

REPORT NUMBER: P960512
CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P960512

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	723.6	0.0	723.6
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	4687.4	0.0	4687.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	5411.0	0.0	5411.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.1
10°-20°	157.5	2.9
20°-30°	298.4	5.5
30°-40°	603.9	11.2
40°-50°	1028.7	19.0
50°-60°	1399.0	25.9
60°-70°	1313.7	24.3
70°-80°	526.3	9.7
80°-90°	25.5	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°	5411.0	100.0
0°-180°	5411.0	100.0

Coefficient of Utilization



REPORT NUMBER: P960512

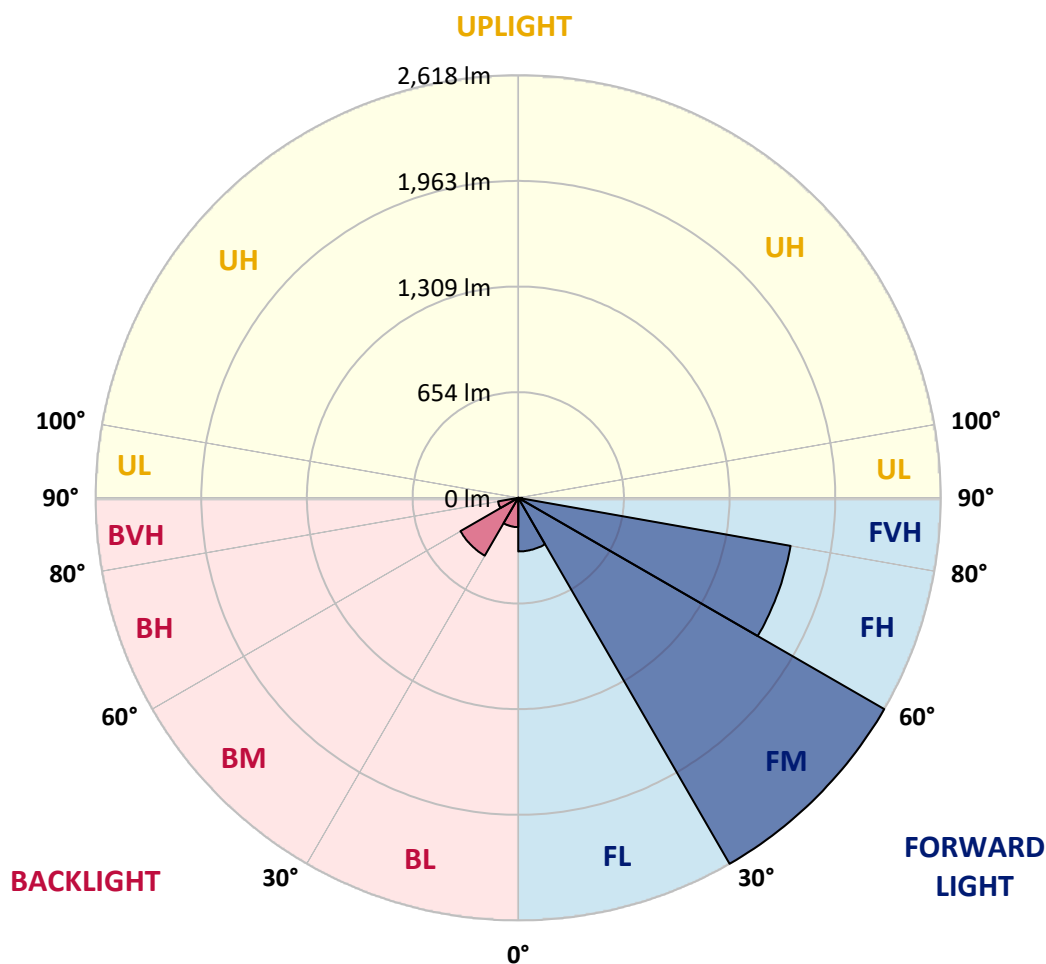
CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	332.3	6.1			
FM	(30°-60°)	2617.8	48.4			
FH	(60°-80°)	1713.0	31.7			G1/1800
FVH	(80°-90°)	24.3	0.4			G1/100
BL	(0°-30°)	181.7	3.4	B1/500		
BM	(30°-60°)	413.7	7.6	B1/1000		
BH	(60°-80°)	127.0	2.3	B1/500		G1/500
BVH	(80°-90°)	1.2	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 III Short



REPORT NUMBER: P960512

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3
2.5°	627.2	631.5	630.5	629.3	628.9	629.8	630.1	629.8	629.8	629.8	630.1
5°	615.2	618.8	618.8	621.4	625.0	629.3	632.6	633.3	634.1	635.2	634.8
7.5°	592.3	595.2	597.5	605.8	614.8	626.5	636.2	641.3	642.1	646.1	647.5
10°	576.8	580.4	584.0	592.8	605.8	623.2	639.9	652.2	654.1	663.5	667.8
12.5°	576.0	579.6	584.4	593.8	609.1	627.5	647.9	665.6	668.9	682.6	691.8
15°	583.6	588.0	592.3	603.9	620.3	642.8	664.5	686.6	689.9	709.5	719.3
17.5°	599.2	605.1	608.3	619.9	637.3	662.4	691.1	716.4	719.3	742.2	754.5
20°	630.1	636.9	638.1	647.5	664.5	691.4	725.5	757.1	760.7	786.8	800.5
22.5°	693.9	703.8	695.1	699.8	714.9	741.8	778.8	818.7	823.8	853.5	865.8
25°	806.4	820.1	797.7	789.7	796.2	824.1	870.5	921.0	926.8	950.8	956.9
27.5°	1027.3	1009.5	975.4	942.1	922.4	938.4	990.7	1053.0	1060.3	1083.5	1076.2
30°	1270.0	1254.4	1208.3	1134.3	1087.8	1085.3	1133.5	1203.2	1211.6	1233.7	1211.6
32.5°	1513.0	1498.1	1448.0	1357.0	1276.4	1236.6	1270.0	1347.3	1351.6	1365.7	1333.1
35°	1752.0	1736.8	1686.7	1593.5	1494.4	1403.8	1397.3	1484.3	1485.7	1500.7	1452.0
37.5°	1992.5	1979.8	1926.5	1835.1	1737.5	1612.3	1551.7	1614.2	1616.0	1630.5	1580.1
40°	2164.1	2169.5	2132.9	2062.2	1978.4	1841.6	1725.2	1752.4	1741.5	1765.8	1735.7
42.5°	2311.4	2322.2	2290.4	2254.8	2206.2	2085.8	1939.9	1935.2	1917.8	1930.9	1899.6
45°	2438.7	2447.8	2419.1	2410.8	2409.7	2325.1	2174.6	2146.4	2122.1	2119.5	2082.1
47.5°	2485.5	2502.9	2515.2	2543.1	2597.6	2562.0	2417.3	2373.4	2346.2	2326.2	2267.1
50°	2503.3	2521.8	2563.8	2645.1	2773.9	2789.1	2658.8	2609.5	2576.1	2540.0	2452.8
52.5°	2479.4	2512.4	2569.0	2705.7	2892.4	2971.2	2890.7	2847.6	2809.4	2750.3	2621.1
55°	2338.2	2371.2	2487.0	2705.0	2951.6	3098.9	3109.7	3090.6	3047.7	2954.5	2757.1
57.5°	2040.8	2089.8	2272.9	2612.8	2950.6	3208.8	3324.5	3338.3	3290.5	3156.9	2864.2
60°	1628.7	1695.0	1918.5	2408.5	2859.4	3268.3	3512.8	3581.7	3530.9	3356.5	2950.9
62.5°	1136.4	1213.4	1424.9	2088.6	2651.3	3225.5	3650.2	3777.5	3739.1	3534.9	2984.3
65°	693.2	717.9	888.4	1643.6	2297.2	3046.3	3692.7	3883.5	3870.8	3644.1	2934.9
67.5°	461.8	482.5	531.5	1127.0	1783.2	2688.3	3591.1	3865.0	3868.7	3626.3	2754.3
70°	278.2	296.0	327.9	655.5	1155.7	2127.8	3276.6	3629.2	3650.2	3388.8	2411.8
72.5°	114.6	126.6	155.6	297.0	598.5	1350.4	2609.1	3115.9	3164.9	2849.3	1851.0
75°	64.9	71.1	91.4	149.0	259.7	629.3	1580.4	2212.0	2284.2	1963.9	1113.6
77.5°	43.2	46.0	59.1	96.5	146.2	214.7	675.4	1152.4	1290.3	1072.7	482.1
80°	29.0	31.6	40.6	64.6	95.0	92.1	215.1	426.9	525.2	368.6	117.6
82.5°	19.6	20.0	29.0	42.4	60.2	44.6	63.4	132.7	166.9	106.6	44.6
85°	11.3	10.9	21.4	24.7	26.9	18.4	19.3	39.9	52.3	45.0	25.4
87.5°	1.4	2.2	8.3	6.6	3.6	4.0	4.0	6.9	10.1	10.9	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P960512

CATALOG NUMBER: NAV-SB1C-830-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3	629.3
2.5°	630.1	629.8	628.6	627.5	625.0	623.5	624.2	623.5	623.2	623.5	625.0
5°	634.8	633.7	630.8	627.2	622.1	615.9	611.9	606.2	600.6	597.5	598.2
7.5°	647.5	646.4	642.4	632.2	615.9	590.2	566.6	545.9	530.3	521.2	521.6
10°	667.8	665.9	659.8	637.3	594.5	538.3	491.5	452.7	427.3	415.3	414.2
12.5°	691.8	689.5	678.7	632.6	553.9	466.2	401.6	358.3	334.8	324.3	323.2
15°	720.1	717.1	695.8	610.1	494.8	386.3	327.2	294.9	279.7	270.2	270.6
17.5°	755.2	750.1	708.5	576.4	430.6	325.3	281.5	257.2	243.7	234.7	234.0
20°	800.9	792.6	718.6	536.2	371.5	286.9	250.6	230.3	220.2	212.2	210.7
22.5°	864.8	852.8	730.9	492.6	329.7	260.5	227.8	212.9	204.6	195.5	194.0
25°	943.8	929.7	746.2	452.3	301.0	237.6	211.2	198.7	189.0	178.5	177.4
27.5°	1054.5	1029.1	764.3	419.3	276.4	218.0	195.9	182.1	170.9	162.2	160.3
30°	1177.8	1136.1	780.2	399.3	253.9	199.9	175.9	162.2	151.6	145.4	144.3
32.5°	1294.6	1238.0	790.8	390.6	233.6	179.2	154.2	139.3	131.3	129.5	130.6
35°	1404.9	1330.1	789.7	382.3	215.5	158.6	132.7	117.6	111.3	112.4	112.4
37.5°	1531.9	1428.4	782.1	369.3	200.6	139.6	114.3	100.9	95.4	95.7	97.2
40°	1679.5	1542.0	777.4	344.6	184.3	122.3	99.0	88.1	84.2	82.7	82.3
42.5°	1836.9	1651.9	778.1	316.6	164.0	106.6	88.5	79.4	75.8	74.7	74.3
45°	1995.1	1756.7	779.2	287.6	142.6	94.7	80.9	73.3	71.1	69.6	69.6
47.5°	2143.8	1846.0	758.8	256.5	121.6	85.6	74.7	69.6	67.9	66.0	66.0
50°	2282.4	1905.5	709.9	220.2	104.9	78.3	70.0	66.4	64.6	62.7	62.7
52.5°	2390.1	1914.9	628.9	182.9	93.3	72.9	67.1	63.9	61.7	59.9	59.4
55°	2438.0	1855.8	514.0	148.0	84.2	68.2	64.2	61.0	58.4	56.6	56.3
57.5°	2425.7	1731.3	400.9	119.0	75.4	63.4	60.6	58.4	55.5	52.6	52.3
60°	2365.1	1564.9	302.2	99.0	67.4	58.4	56.6	54.7	50.7	46.4	45.7
62.5°	2260.2	1355.6	215.5	82.0	58.7	52.6	51.9	50.4	44.6	36.6	35.9
65°	2099.9	1101.3	145.1	68.2	50.4	46.0	46.4	43.9	36.3	27.2	26.4
67.5°	1865.6	805.2	92.9	55.9	42.1	38.4	38.8	37.4	30.9	23.2	22.1
70°	1567.0	533.2	60.6	42.4	33.7	29.7	31.9	32.3	26.1	18.9	18.1
72.5°	1148.8	314.9	42.4	31.6	24.7	20.7	26.1	26.9	21.0	14.1	13.4
75°	654.8	149.4	31.9	22.9	15.3	14.6	20.3	20.3	14.6	9.4	8.7
77.5°	275.0	62.4	22.4	14.9	8.7	8.3	13.7	12.7	7.3	4.3	4.3
80°	79.4	27.9	12.0	7.3	3.6	3.3	5.4	4.0	1.8	0.7	0.7
82.5°	31.2	12.3	4.7	2.9	1.4	1.4	0.7	0.0	0.0	0.0	0.0
85°	18.4	5.1	2.2	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	1.1	0.7	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)