

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: EPHESUS

Report Number: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: **EPH-08-0680R-40-80-2S-HEG**

Issue Date: 10/30/2020

Test Information

Test Method: LM-79-08
Report Number: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1912-617-11)
Test Lab: INNOVATION CENTER
Issue Date: 10/30/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-08-0680R-40-80-2S-HEG
Description: EPHESUS LUMASPORT 8 LUMINAIRE
(8) 4000K, 80 CRI LEDS AND 2S BEAM SHAPE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

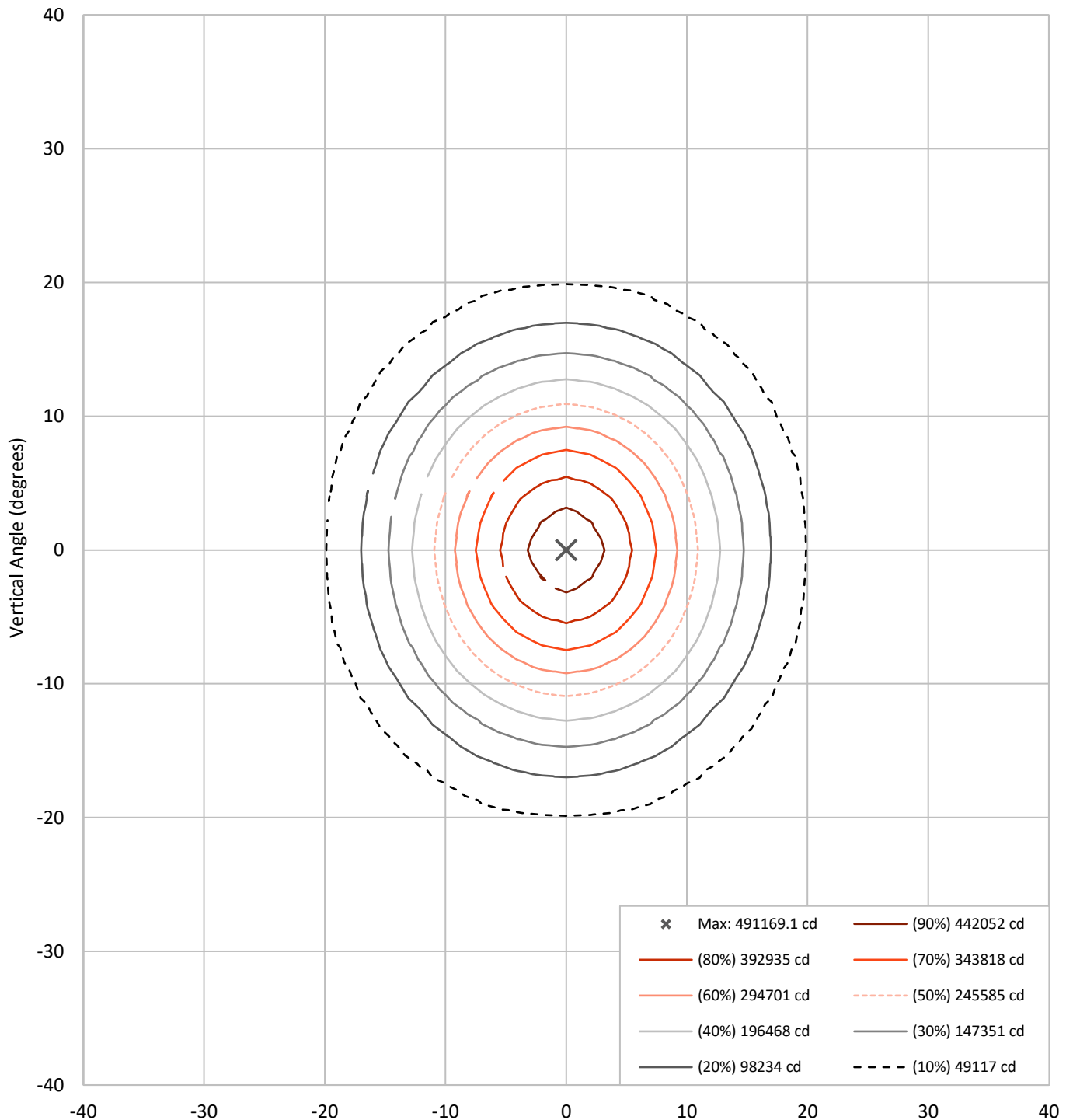
Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	88689.9 lumens	Max Intensity:	491169.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	123.2 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	21.9°H x 21.9°V	Field Angle (10%):	39.8°H x 39.8°V
Beam Lumens:	38751.1 lumens	Field Lumens:	72731.9 lumens
Beam Efficiency:	43.7%	Field Efficiency:	82.0%

Input Watts (W): 720
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: 25 FT

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Iso-Candela Plot





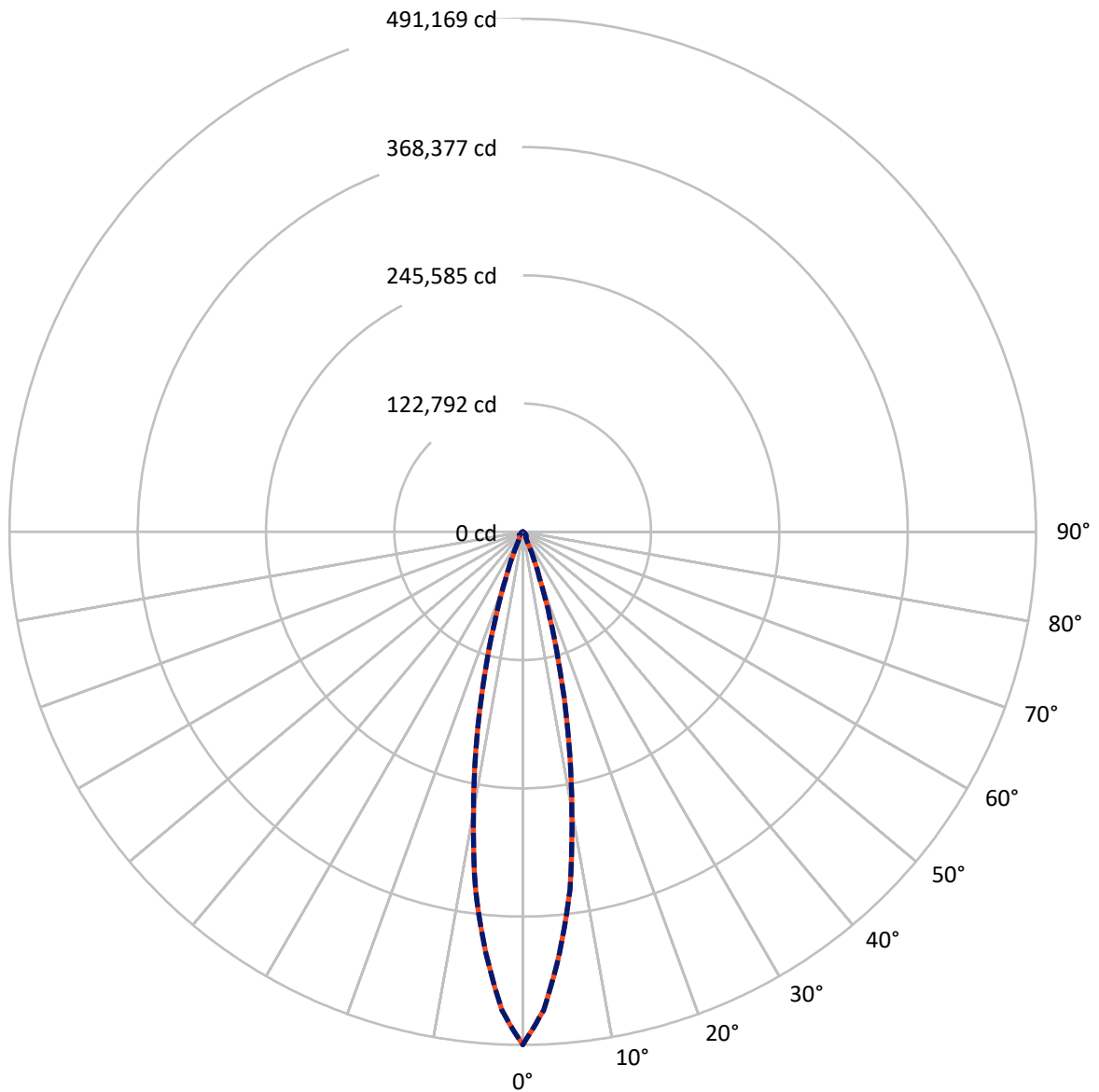
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Lumen Table

90																
80	0.0	0.6		2.6		7.0		9.3		7.0		2.6		0.6		0.0
70																
60	0.3	0.4	1.7	5.3	10.6	16.4	21.1	23.8	23.8	21.1	16.4	10.6	5.3	1.7	0.4	0.3
50		1.3	6.2	15.2	26.3	36.8	43.9	47.5	47.5	43.9	36.8	26.3	15.2	6.2	1.3	
40	0.9	3.3	12.4	26.5	40.6	65.5	100.5	120.7	120.7	100.5	65.5	40.6	26.5	12.4	3.3	0.9
30		5.7	18.6	35.1	77.3	134.0	157.3	166.0	166.0	157.3	134.0	77.3	35.1	18.6	5.7	
20	2.1	7.9	23.5	51.6	121.3	152.0	217.9	448.7	448.7	217.9	152.0	121.3	51.6	23.5	7.9	2.1
10		9.5	26.3	74.6	133.5	205.2	1293.2	3757.2	3757.2	1293.2	205.2	133.5	74.6	26.3	9.5	
0	2.6	10.4	27.6	86.7	136.5	413.5	3661.3	10074.9	10074.9	3661.3	413.5	136.5	86.7	27.6	10.4	2.6
-10		10.4	27.6	86.7	136.5	413.5	3661.3	10074.9	10074.9	3661.3	413.5	136.5	86.7	27.6	10.4	
-20	2.1	9.5	26.3	74.6	133.5	205.2	1293.2	3757.2	3757.2	1293.2	205.2	133.5	74.6	26.3	9.5	2.1
-30		7.9	23.5	51.6	121.3	152.0	217.9	448.7	448.7	217.9	152.0	121.3	51.6	23.5	7.9	
-40	0.9	5.7	18.6	35.1	77.3	134.0	157.3	166.0	166.0	157.3	134.0	77.3	35.1	18.6	5.7	0.9
-50		3.3	12.4	26.5	40.6	65.5	100.5	120.7	120.7	100.5	65.5	40.6	26.5	12.4	3.3	
-60	0.3	1.3	6.2	15.2	26.3	36.8	43.9	47.5	47.5	43.9	36.8	26.3	15.2	6.2	1.3	0.3
-70		0.4	1.7	5.3	10.6	16.4	21.1	23.8	23.8	21.1	16.4	10.6	5.3	1.7	0.4	
-80																
-90	0.0	0.6		2.6		7.0		9.3		7.0		2.6		0.6		0.0

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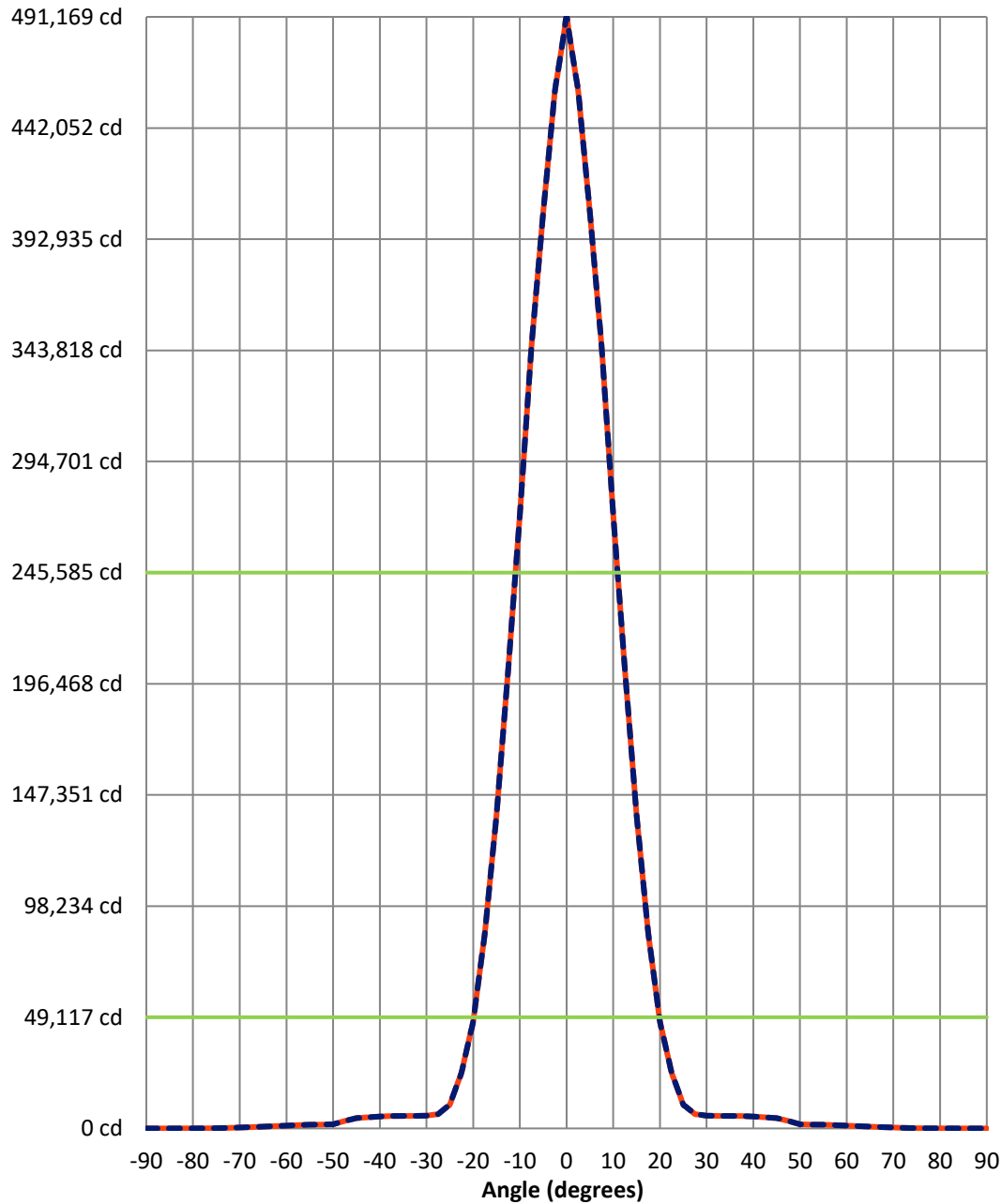
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 21.9°
 V Angle: 21.9°
 Lumens: 38751.1
 Efficiency: 43.7%

Field:
 H Angle: 39.8°
 V Angle: 39.8°
 Lumens: 72731.9
 Efficiency: 82.0%

Spill:
 Lumens: 15958
 Efficiency: 18.0%

— Vertical Distribution through 0-Deg
 - - Horizontal Distribution through 0-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7
85°	0.0	0.1	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.3	1.4
82.5°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.5	1.8	2.4	3.0
80°	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.6	3.4	4.2	5.0
77.5°	0.0	0.4	0.7	1.1	1.5	2.1	3.1	4.1	5.1	6.0	7.3
75°	0.0	0.4	0.9	1.3	1.8	3.1	4.3	5.5	6.8	8.7	10.7
72.5°	0.0	0.5	1.0	1.5	2.6	4.1	5.5	7.1	9.5	11.8	14.0
70°	0.0	0.6	1.2	1.8	3.4	5.1	6.8	9.5	12.1	14.8	18.4
67.5°	0.0	0.7	1.3	2.4	4.2	6.0	8.7	11.8	14.8	18.9	22.9
65°	0.0	0.7	1.4	3.0	5.0	7.3	10.7	14.0	18.4	22.9	28.2
62.5°	0.0	0.8	1.6	3.5	5.7	8.9	12.6	16.9	21.9	27.4	35.2
60°	0.0	0.8	1.7	4.1	6.5	10.5	14.5	19.9	25.4	33.6	42.0
57.5°	0.0	0.9	2.1	4.6	7.7	12.0	17.0	22.9	30.4	39.6	58.9
55°	0.0	1.0	2.4	5.1	8.8	13.5	19.4	25.8	35.6	48.4	80.2
52.5°	0.0	1.0	2.7	5.7	10.0	15.0	21.8	30.1	40.7	67.1	100.9
50°	0.0	1.1	3.1	6.1	11.1	17.0	24.2	34.4	48.9	85.2	142.0
47.5°	0.0	1.1	3.4	6.7	12.2	18.8	26.6	38.6	64.5	102.7	184.2
45°	0.0	1.2	3.7	7.5	13.2	20.6	30.0	42.6	79.4	138.8	225.0
42.5°	0.0	1.3	4.0	8.2	14.2	22.4	33.3	51.5	93.8	174.0	275.3
40°	0.0	1.3	4.3	8.9	15.4	24.0	36.5	63.5	112.7	207.6	325.3
37.5°	0.0	1.3	4.5	9.6	16.6	25.6	39.5	74.9	141.1	242.6	373.0
35°	0.0	1.4	4.8	10.2	17.8	27.6	42.3	85.7	167.9	283.0	418.4
32.5°	0.0	1.4	5.0	10.8	18.9	29.8	46.8	95.8	193.2	321.2	461.5
30°	0.0	1.5	5.2	11.4	19.9	31.9	54.9	107.9	216.9	357.0	501.9
27.5°	0.0	1.5	5.4	11.9	20.9	33.8	62.4	127.1	241.6	390.2	539.4
25°	0.0	1.5	5.6	12.4	21.8	35.6	69.3	144.7	268.7	421.1	574.5
22.5°	0.0	1.6	5.8	12.8	22.6	37.2	75.6	160.8	293.4	449.3	614.1
20°	0.0	1.6	5.9	13.2	23.3	38.7	81.3	175.3	315.6	474.8	649.8
17.5°	0.0	1.6	6.1	13.6	24.0	39.9	86.4	188.1	335.4	497.5	681.6
15°	0.0	1.6	6.2	13.9	24.5	41.1	90.8	199.3	352.6	517.3	709.3
12.5°	0.0	1.7	6.3	14.1	25.0	42.0	94.5	208.9	367.3	534.1	732.9
10°	0.0	1.7	6.4	14.3	25.4	42.8	97.6	216.7	379.4	548.0	752.3
7.5°	0.0	1.7	6.4	14.5	25.7	43.4	100.0	222.8	388.8	558.8	767.5
5°	0.0	1.7	6.5	14.6	25.9	43.9	101.7	227.2	395.5	566.5	778.4
2.5°	0.0	1.7	6.5	14.7	26.1	44.1	102.8	229.8	399.5	571.1	784.9
0°	0.0	1.7	6.5	14.7	26.1	44.1	102.8	229.8	399.5	571.1	784.9
-2.5°	0.0	1.7	6.5	14.7	26.1	44.1	102.8	229.8	399.5	571.1	784.9
-5°	0.0	1.7	6.5	14.6	25.9	43.9	101.7	227.2	395.5	566.5	778.4
-7.5°	0.0	1.7	6.4	14.5	25.7	43.4	100.0	222.8	388.8	558.8	767.5
-10°	0.0	1.7	6.4	14.3	25.4	42.8	97.6	216.7	379.4	548.0	752.3
-12.5°	0.0	1.7	6.3	14.1	25.0	42.0	94.5	208.9	367.3	534.1	732.9
-15°	0.0	1.6	6.2	13.9	24.5	41.1	90.8	199.3	352.6	517.3	709.3
-17.5°	0.0	1.6	6.1	13.6	24.0	39.9	86.4	188.1	335.4	497.5	681.6
-20°	0.0	1.6	5.9	13.2	23.3	38.7	81.3	175.3	315.6	474.8	649.8



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 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-90°	-87.5°	-85°	-82.5°	-80°	-77.5°	-75°	-72.5°	-70°	-67.5°	-65°
-22.5°	0.0	1.6	5.8	12.8	22.6	37.2	75.6	160.8	293.4	449.3	614.1
-25°	0.0	1.5	5.6	12.4	21.8	35.6	69.3	144.7	268.7	421.1	574.5
-27.5°	0.0	1.5	5.4	11.9	20.9	33.8	62.4	127.1	241.6	390.2	539.4
-30°	0.0	1.5	5.2	11.4	19.9	31.9	54.9	107.9	216.9	357.0	501.9
-32.5°	0.0	1.4	5.0	10.8	18.9	29.8	46.8	95.8	193.2	321.2	461.5
-35°	0.0	1.4	4.8	10.2	17.8	27.6	42.3	85.7	167.9	283.0	418.4
-37.5°	0.0	1.3	4.5	9.6	16.6	25.6	39.5	74.9	141.1	242.6	373.0
-40°	0.0	1.3	4.3	8.9	15.4	24.0	36.5	63.5	112.7	207.6	325.3
-42.5°	0.0	1.3	4.0	8.2	14.2	22.4	33.3	51.5	93.8	174.0	275.3
-45°	0.0	1.2	3.7	7.5	13.2	20.6	30.0	42.6	79.4	138.8	225.0
-47.5°	0.0	1.1	3.4	6.7	12.2	18.8	26.6	38.6	64.5	102.7	184.2
-50°	0.0	1.1	3.1	6.1	11.1	17.0	24.2	34.4	48.9	85.2	142.0
-52.5°	0.0	1.0	2.7	5.7	10.0	15.0	21.8	30.1	40.7	67.1	100.9
-55°	0.0	1.0	2.4	5.1	8.8	13.5	19.4	25.8	35.6	48.4	80.2
-57.5°	0.0	0.9	2.1	4.6	7.7	12.0	17.0	22.9	30.4	39.6	58.9
-60°	0.0	0.8	1.7	4.1	6.5	10.5	14.5	19.9	25.4	33.6	42.0
-62.5°	0.0	0.8	1.6	3.5	5.7	8.9	12.6	16.9	21.9	27.4	35.2
-65°	0.0	0.7	1.4	3.0	5.0	7.3	10.7	14.0	18.4	22.9	28.2
-67.5°	0.0	0.7	1.3	2.4	4.2	6.0	8.7	11.8	14.8	18.9	22.9
-70°	0.0	0.6	1.2	1.8	3.4	5.1	6.8	9.5	12.1	14.8	18.4
-72.5°	0.0	0.5	1.0	1.5	2.6	4.1	5.5	7.1	9.5	11.8	14.0
-75°	0.0	0.4	0.9	1.3	1.8	3.1	4.3	5.5	6.8	8.7	10.7
-77.5°	0.0	0.4	0.7	1.1	1.5	2.1	3.1	4.1	5.1	6.0	7.3
-80°	0.0	0.3	0.6	0.9	1.2	1.5	1.8	2.6	3.4	4.2	5.0
-82.5°	0.0	0.2	0.4	0.7	0.9	1.1	1.3	1.5	1.8	2.4	3.0
-85°	0.0	0.1	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.3	1.4
-87.5°	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7
-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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 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.3
85°	1.6	1.7	2.1	2.4	2.7	3.1	3.4	3.7	4.0	4.3	4.5
82.5°	3.5	4.1	4.6	5.1	5.7	6.1	6.7	7.5	8.2	8.9	9.6
80°	5.7	6.5	7.7	8.8	10.0	11.1	12.2	13.2	14.2	15.4	16.6
77.5°	8.9	10.5	12.0	13.5	15.0	17.0	18.8	20.6	22.4	24.0	25.6
75°	12.6	14.5	17.0	19.4	21.8	24.2	26.6	30.0	33.3	36.5	39.5
72.5°	16.9	19.9	22.9	25.8	30.1	34.4	38.6	42.6	51.5	63.5	74.9
70°	21.9	25.4	30.4	35.6	40.7	48.9	64.5	79.4	93.8	112.7	141.1
67.5°	27.4	33.6	39.6	48.4	67.1	85.2	102.7	138.8	174.0	207.6	242.6
65°	35.2	42.0	58.9	80.2	100.9	142.0	184.2	225.0	275.3	325.3	373.0
62.5°	42.8	64.2	88.1	121.4	170.8	218.8	276.8	336.7	394.3	450.0	503.3
60°	64.2	90.8	132.9	188.1	245.7	315.6	383.4	449.3	513.0	574.5	647.4
57.5°	88.1	132.9	193.9	261.3	339.1	414.9	489.2	561.0	644.5	727.5	807.8
55°	121.4	188.1	261.3	346.9	430.9	513.2	598.4	695.1	788.6	882.6	972.6
52.5°	170.8	245.7	339.1	430.9	521.3	618.6	725.8	831.6	936.7	1037.1	1131.3
50°	218.8	315.6	414.9	513.2	618.6	736.0	853.3	969.5	1079.9	1185.3	1290.8
47.5°	276.8	383.4	489.2	598.4	725.8	853.3	980.5	1101.5	1218.0	1338.1	1454.5
45°	336.7	449.3	561.0	695.1	831.6	969.5	1101.5	1228.9	1362.0	1484.7	1582.0
42.5°	394.3	513.0	644.5	788.6	936.7	1079.9	1218.0	1362.0	1494.2	1601.3	1658.7
40°	450.0	574.5	727.5	882.6	1037.1	1185.3	1338.1	1484.7	1601.3	1660.9	1684.3
37.5°	503.3	647.4	807.8	972.6	1131.3	1290.8	1454.5	1582.0	1658.7	1684.3	1773.2
35°	553.8	716.6	886.8	1056.9	1221.2	1394.8	1543.7	1652.4	1680.0	1765.1	2144.3
32.5°	608.7	782.1	961.6	1135.8	1312.4	1487.0	1626.8	1671.5	1740.8	1976.1	3006.8
30°	664.6	846.2	1031.4	1210.1	1398.9	1560.1	1658.9	1700.7	1812.5	2749.5	3753.0
27.5°	716.6	906.2	1095.1	1283.4	1476.3	1628.7	1674.8	1763.8	2326.4	3454.6	4419.5
25°	764.7	961.6	1154.1	1352.6	1535.2	1656.1	1700.4	1822.7	2965.7	4039.7	4697.5
22.5°	809.7	1012.4	1208.2	1416.1	1589.3	1668.7	1750.8	2295.6	3520.0	4564.5	4864.8
20°	851.3	1056.9	1259.3	1471.3	1638.4	1680.1	1796.7	2796.7	3981.5	4707.3	5013.0
17.5°	888.3	1096.6	1306.2	1511.5	1653.9	1703.5	1898.7	3246.8	4396.8	4836.0	5144.4
15°	920.6	1131.3	1347.3	1546.8	1662.2	1736.8	2264.0	3593.0	4616.3	4948.1	5259.9
12.5°	948.1	1160.9	1382.3	1576.9	1669.2	1765.3	2576.9	3883.2	4706.7	5040.8	5327.6
10°	970.7	1185.3	1411.2	1601.7	1675.0	1788.8	2835.7	4123.5	4781.7	5117.9	5384.0
7.5°	988.4	1204.3	1433.7	1621.1	1679.6	1807.2	3038.8	4312.2	4840.6	5178.6	5428.6
5°	1001.1	1218.0	1449.9	1635.0	1682.9	1820.5	3184.7	4447.9	4883.1	5222.3	5460.7
2.5°	1008.8	1226.2	1459.6	1643.4	1684.8	1828.4	3272.7	4529.8	4908.7	5248.8	5480.2
0°	1011.3	1228.9	1462.9	1646.2	1685.5	1831.1	3302.1	4557.2	4917.3	5257.6	5486.7
-2.5°	1008.8	1226.2	1459.6	1643.4	1684.8	1828.4	3272.7	4529.8	4908.7	5248.8	5480.2
-5°	1001.1	1218.0	1449.9	1635.0	1682.9	1820.5	3184.7	4447.9	4883.1	5222.3	5460.7
-7.5°	988.4	1204.3	1433.7	1621.1	1679.6	1807.2	3038.8	4312.2	4840.6	5178.6	5428.6
-10°	970.7	1185.3	1411.2	1601.7	1675.0	1788.8	2835.7	4123.5	4781.7	5117.9	5384.0
-12.5°	948.1	1160.9	1382.3	1576.9	1669.2	1765.3	2576.9	3883.2	4706.7	5040.8	5327.6
-15°	920.6	1131.3	1347.3	1546.8	1662.2	1736.8	2264.0	3593.0	4616.3	4948.1	5259.9
-17.5°	888.3	1096.6	1306.2	1511.5	1653.9	1703.5	1898.7	3246.8	4396.8	4836.0	5144.4
-20°	851.3	1056.9	1259.3	1471.3	1638.4	1680.1	1796.7	2796.7	3981.5	4707.3	5013.0



REPORT NUMBER: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-62.5°	-60°	-57.5°	-55°	-52.5°	-50°	-47.5°	-45°	-42.5°	-40°	-37.5°
-22.5°	809.7	1012.4	1208.2	1416.1	1589.3	1668.7	1750.8	2295.6	3520.0	4564.5	4864.8
-25°	764.7	961.6	1154.1	1352.6	1535.2	1656.1	1700.4	1822.7	2965.7	4039.7	4697.5
-27.5°	716.6	906.2	1095.1	1283.4	1476.3	1628.7	1674.8	1763.8	2326.4	3454.6	4419.5
-30°	664.6	846.2	1031.4	1210.1	1398.9	1560.1	1658.9	1700.7	1812.5	2749.5	3753.0
-32.5°	608.7	782.1	961.6	1135.8	1312.4	1487.0	1626.8	1671.5	1740.8	1976.1	3006.8
-35°	553.8	716.6	886.8	1056.9	1221.2	1394.8	1543.7	1652.4	1680.0	1765.1	2144.3
-37.5°	503.3	647.4	807.8	972.6	1131.3	1290.8	1454.5	1582.0	1658.7	1684.3	1773.2
-40°	450.0	574.5	727.5	882.6	1037.1	1185.3	1338.1	1484.7	1601.3	1660.9	1684.3
-42.5°	394.3	513.0	644.5	788.6	936.7	1079.9	1218.0	1362.0	1494.2	1601.3	1658.7
-45°	336.7	449.3	561.0	695.1	831.6	969.5	1101.5	1228.9	1362.0	1484.7	1582.0
-47.5°	276.8	383.4	489.2	598.4	725.8	853.3	980.5	1101.5	1218.0	1338.1	1454.5
-50°	218.8	315.6	414.9	513.2	618.6	736.0	853.3	969.5	1079.9	1185.3	1290.8
-52.5°	170.8	245.7	339.1	430.9	521.3	618.6	725.8	831.6	936.7	1037.1	1131.3
-55°	121.4	188.1	261.3	346.9	430.9	513.2	598.4	695.1	788.6	882.6	972.6
-57.5°	88.1	132.9	193.9	261.3	339.1	414.9	489.2	561.0	644.5	727.5	807.8
-60°	64.2	90.8	132.9	188.1	245.7	315.6	383.4	449.3	513.0	574.5	647.4
-62.5°	42.8	64.2	88.1	121.4	170.8	218.8	276.8	336.7	394.3	450.0	503.3
-65°	35.2	42.0	58.9	80.2	100.9	142.0	184.2	225.0	275.3	325.3	373.0
-67.5°	27.4	33.6	39.6	48.4	67.1	85.2	102.7	138.8	174.0	207.6	242.6
-70°	21.9	25.4	30.4	35.6	40.7	48.9	64.5	79.4	93.8	112.7	141.1
-72.5°	16.9	19.9	22.9	25.8	30.1	34.4	38.6	42.6	51.5	63.5	74.9
-75°	12.6	14.5	17.0	19.4	21.8	24.2	26.6	30.0	33.3	36.5	39.5
-77.5°	8.9	10.5	12.0	13.5	15.0	17.0	18.8	20.6	22.4	24.0	25.6
-80°	5.7	6.5	7.7	8.8	10.0	11.1	12.2	13.2	14.2	15.4	16.6
-82.5°	3.5	4.1	4.6	5.1	5.7	6.1	6.7	7.5	8.2	8.9	9.6
-85°	1.6	1.7	2.1	2.4	2.7	3.1	3.4	3.7	4.0	4.3	4.5
-87.5°	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3	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



REPORT NUMBER: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7
85°	4.8	5.0	5.2	5.4	5.6	5.8	5.9	6.1	6.2	6.3	6.4
82.5°	10.2	10.8	11.4	11.9	12.4	12.8	13.2	13.6	13.9	14.1	14.3
80°	17.8	18.9	19.9	20.9	21.8	22.6	23.3	24.0	24.5	25.0	25.4
77.5°	27.6	29.8	31.9	33.8	35.6	37.2	38.7	39.9	41.1	42.0	42.8
75°	42.3	46.8	54.9	62.4	69.3	75.6	81.3	86.4	90.8	94.5	97.6
72.5°	85.7	95.8	107.9	127.1	144.7	160.8	175.3	188.1	199.3	208.9	216.7
70°	167.9	193.2	216.9	241.6	268.7	293.4	315.6	335.4	352.6	367.3	379.4
67.5°	283.0	321.2	357.0	390.2	421.1	449.3	474.8	497.5	517.3	534.1	548.0
65°	418.4	461.5	501.9	539.4	574.5	614.1	649.8	681.6	709.3	732.9	752.3
62.5°	553.8	608.7	664.6	716.6	764.7	809.7	851.3	888.3	920.6	948.1	970.7
60°	716.6	782.1	846.2	906.2	961.6	1012.4	1056.9	1096.6	1131.3	1160.9	1185.3
57.5°	886.8	961.6	1031.4	1095.1	1154.1	1208.2	1259.3	1306.2	1347.3	1382.3	1411.2
55°	1056.9	1135.8	1210.1	1283.4	1352.6	1416.1	1471.3	1511.5	1546.8	1576.9	1601.7
52.5°	1221.2	1312.4	1398.9	1476.3	1535.2	1589.3	1638.4	1653.9	1662.2	1669.2	1675.0
50°	1394.8	1487.0	1560.1	1628.7	1656.1	1668.7	1680.1	1703.5	1736.8	1765.3	1788.8
47.5°	1543.7	1626.8	1658.9	1674.8	1700.4	1750.8	1796.7	1898.7	2264.0	2576.9	2835.7
45°	1652.4	1671.5	1700.7	1763.8	1822.7	2295.6	2796.7	3246.8	3593.0	3883.2	4123.5
42.5°	1680.0	1740.8	1812.5	2326.4	2965.7	3520.0	3981.5	4396.8	4616.3	4706.7	4781.7
40°	1765.1	1976.1	2749.5	3454.6	4039.7	4564.5	4707.3	4836.0	4948.1	5040.8	5117.9
37.5°	2144.3	3006.8	3753.0	4419.5	4697.5	4864.8	5013.0	5144.4	5259.9	5327.6	5384.0
35°	3093.3	3903.9	4584.1	4787.9	4976.7	5146.4	5288.0	5383.5	5468.5	5493.4	5500.9
32.5°	3903.9	4606.4	4833.7	5043.3	5237.3	5366.3	5479.6	5498.4	5509.5	5517.3	5522.1
30°	4584.1	4833.7	5065.7	5275.0	5414.3	5493.8	5508.6	5519.0	5526.1	5540.8	5575.8
27.5°	4787.9	5043.3	5275.0	5430.5	5497.9	5514.7	5524.1	5542.9	5594.8	5640.3	5880.8
25°	4976.7	5237.3	5414.3	5497.9	5516.0	5526.7	5570.0	5632.2	5942.4	6255.0	7496.4
22.5°	5146.4	5366.3	5493.8	5514.7	5526.7	5579.1	5708.2	6130.4	7466.6	9557.2	13269.0
20°	5288.0	5479.6	5508.6	5524.1	5570.0	5708.2	6194.1	8285.2	11583.8	19307.2	26759.3
17.5°	5383.5	5498.4	5519.0	5542.9	5632.2	6130.4	8285.2	13060.1	22437.7	34681.0	46544.3
15°	5468.5	5509.5	5526.1	5594.8	5942.4	7466.6	11583.8	22437.7	37398.2	56086.2	79007.6
12.5°	5493.4	5517.3	5540.8	5640.3	6255.0	9557.2	19307.2	34681.0	56086.2	84574.7	118491.0
10°	5500.9	5522.1	5575.8	5880.8	7496.4	13269.0	26759.3	46544.3	79007.6	118491.0	161458.0
7.5°	5506.8	5525.9	5603.7	6073.9	8799.0	18137.5	35453.3	62952.6	102305.0	150155.1	203290.9
5°	5511.1	5528.7	5624.0	6214.8	9753.7	21726.7	41912.3	75655.4	121935.1	178337.7	239126.5
2.5°	5513.6	5530.3	5636.4	6300.6	10337.0	23928.6	45898.0	83558.2	134294.7	196411.5	262803.2
0°	5514.5	5530.9	5640.5	6329.4	10533.2	24671.1	47246.1	86243.3	138522.8	202662.5	271149.9
-2.5°	5513.6	5530.3	5636.4	6300.6	10337.0	23928.6	45898.0	83558.2	134294.7	196411.5	262803.2
-5°	5511.1	5528.7	5624.0	6214.8	9753.7	21726.7	41912.3	75655.4	121935.1	178337.7	239126.5
-7.5°	5506.8	5525.9	5603.7	6073.9	8799.0	18137.5	35453.3	62952.6	102305.0	150155.1	203290.9
-10°	5500.9	5522.1	5575.8	5880.8	7496.4	13269.0	26759.3	46544.3	79007.6	118491.0	161458.0
-12.5°	5493.4	5517.3	5540.8	5640.3	6255.0	9557.2	19307.2	34681.0	56086.2	84574.7	118491.0
-15°	5468.5	5509.5	5526.1	5594.8	5942.4	7466.6	11583.8	22437.7	37398.2	56086.2	79007.6
-17.5°	5383.5	5498.4	5519.0	5542.9	5632.2	6130.4	8285.2	13060.1	22437.7	34681.0	46544.3
-20°	5288.0	5479.6	5508.6	5524.1	5570.0	5708.2	6194.1	8285.2	11583.8	19307.2	26759.3



REPORT NUMBER: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-35°	-32.5°	-30°	-27.5°	-25°	-22.5°	-20°	-17.5°	-15°	-12.5°	-10°
-22.5°	5146.4	5366.3	5493.8	5514.7	5526.7	5579.1	5708.2	6130.4	7466.6	9557.2	13269.0
-25°	4976.7	5237.3	5414.3	5497.9	5516.0	5526.7	5570.0	5632.2	5942.4	6255.0	7496.4
-27.5°	4787.9	5043.3	5275.0	5430.5	5497.9	5514.7	5524.1	5542.9	5594.8	5640.3	5880.8
-30°	4584.1	4833.7	5065.7	5275.0	5414.3	5493.8	5508.6	5519.0	5526.1	5540.8	5575.8
-32.5°	3903.9	4606.4	4833.7	5043.3	5237.3	5366.3	5479.6	5498.4	5509.5	5517.3	5522.1
-35°	3093.3	3903.9	4584.1	4787.9	4976.7	5146.4	5288.0	5383.5	5468.5	5493.4	5500.9
-37.5°	2144.3	3006.8	3753.0	4419.5	4697.5	4864.8	5013.0	5144.4	5259.9	5327.6	5384.0
-40°	1765.1	1976.1	2749.5	3454.6	4039.7	4564.5	4707.3	4836.0	4948.1	5040.8	5117.9
-42.5°	1680.0	1740.8	1812.5	2326.4	2965.7	3520.0	3981.5	4396.8	4616.3	4706.7	4781.7
-45°	1652.4	1671.5	1700.7	1763.8	1822.7	2295.6	2796.7	3246.8	3593.0	3883.2	4123.5
-47.5°	1543.7	1626.8	1658.9	1674.8	1700.4	1750.8	1796.7	1898.7	2264.0	2576.9	2835.7
-50°	1394.8	1487.0	1560.1	1628.7	1656.1	1668.7	1680.1	1703.5	1736.8	1765.3	1788.8
-52.5°	1221.2	1312.4	1398.9	1476.3	1535.2	1589.3	1638.4	1653.9	1662.2	1669.2	1675.0
-55°	1056.9	1135.8	1210.1	1283.4	1352.6	1416.1	1471.3	1511.5	1546.8	1576.9	1601.7
-57.5°	886.8	961.6	1031.4	1095.1	1154.1	1208.2	1259.3	1306.2	1347.3	1382.3	1411.2
-60°	716.6	782.1	846.2	906.2	961.6	1012.4	1056.9	1096.6	1131.3	1160.9	1185.3
-62.5°	553.8	608.7	664.6	716.6	764.7	809.7	851.3	888.3	920.6	948.1	970.7
-65°	418.4	461.5	501.9	539.4	574.5	614.1	649.8	681.6	709.3	732.9	752.3
-67.5°	283.0	321.2	357.0	390.2	421.1	449.3	474.8	497.5	517.3	534.1	548.0
-70°	167.9	193.2	216.9	241.6	268.7	293.4	315.6	335.4	352.6	367.3	379.4
-72.5°	85.7	95.8	107.9	127.1	144.7	160.8	175.3	188.1	199.3	208.9	216.7
-75°	42.3	46.8	54.9	62.4	69.3	75.6	81.3	86.4	90.8	94.5	97.6
-77.5°	27.6	29.8	31.9	33.8	35.6	37.2	38.7	39.9	41.1	42.0	42.8
-80°	17.8	18.9	19.9	20.9	21.8	22.6	23.3	24.0	24.5	25.0	25.4
-82.5°	10.2	10.8	11.4	11.9	12.4	12.8	13.2	13.6	13.9	14.1	14.3
-85°	4.8	5.0	5.2	5.4	5.6	5.8	5.9	6.1	6.2	6.3	6.4
-87.5°	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.7
-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: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
85°	6.4	6.5	6.5	6.5	6.5	6.5	6.4	6.4	6.3	6.2	6.1
82.5°	14.5	14.6	14.7	14.7	14.7	14.6	14.5	14.3	14.1	13.9	13.6
80°	25.7	25.9	26.1	26.1	26.1	25.9	25.7	25.4	25.0	24.5	24.0
77.5°	43.4	43.9	44.1	44.2	44.1	43.9	43.4	42.8	42.0	41.1	39.9
75°	100.0	101.7	102.8	103.1	102.8	101.7	100.0	97.6	94.5	90.8	86.4
72.5°	222.8	227.2	229.8	230.7	229.8	227.2	222.8	216.7	208.9	199.3	188.1
70°	388.8	395.5	399.5	400.9	399.5	395.5	388.8	379.4	367.3	352.6	335.4
67.5°	558.8	566.5	571.1	572.7	571.1	566.5	558.8	548.0	534.1	517.3	497.5
65°	767.5	778.4	784.9	787.1	784.9	778.4	767.5	752.3	732.9	709.3	681.6
62.5°	988.4	1001.1	1008.8	1011.3	1008.8	1001.1	988.4	970.7	948.1	920.6	888.3
60°	1204.3	1218.0	1226.2	1228.9	1226.2	1218.0	1204.3	1185.3	1160.9	1131.3	1096.6
57.5°	1433.7	1449.9	1459.6	1462.9	1459.6	1449.9	1433.7	1411.2	1382.3	1347.3	1306.2
55°	1621.1	1635.0	1643.4	1646.2	1643.4	1635.0	1621.1	1601.7	1576.9	1546.8	1511.5
52.5°	1679.6	1682.9	1684.8	1685.5	1684.8	1682.9	1679.6	1675.0	1669.2	1662.2	1653.9
50°	1807.2	1820.5	1828.4	1831.1	1828.4	1820.5	1807.2	1788.8	1765.3	1736.8	1703.5
47.5°	3038.8	3184.7	3272.7	3302.1	3272.7	3184.7	3038.8	2835.7	2576.9	2264.0	1898.7
45°	4312.2	4447.9	4529.8	4557.2	4529.8	4447.9	4312.2	4123.5	3883.2	3593.0	3246.8
42.5°	4840.6	4883.1	4908.7	4917.3	4908.7	4883.1	4840.6	4781.7	4706.7	4616.3	4396.8
40°	5178.6	5222.3	5248.8	5257.6	5248.8	5222.3	5178.6	5117.9	5040.8	4948.1	4836.0
37.5°	5428.6	5460.7	5480.2	5486.7	5480.2	5460.7	5428.6	5384.0	5327.6	5259.9	5144.4
35°	5506.8	5511.1	5513.6	5514.5	5513.6	5511.1	5506.8	5500.9	5493.4	5468.5	5383.5
32.5°	5525.9	5528.7	5530.3	5530.9	5530.3	5528.7	5525.9	5522.1	5517.3	5509.5	5498.4
30°	5603.7	5624.0	5636.4	5640.5	5636.4	5624.0	5603.7	5575.8	5540.8	5526.1	5519.0
27.5°	6073.9	6214.8	6300.6	6329.4	6300.6	6214.8	6073.9	5880.8	5640.3	5594.8	5542.9
25°	8799.0	9753.7	10337.0	10533.2	10337.0	9753.7	8799.0	7496.4	6255.0	5942.4	5632.2
22.5°	18137.5	21726.7	23928.6	24671.1	23928.6	21726.7	18137.5	13269.0	9557.2	7466.6	6130.4
20°	35453.3	41912.3	45898.0	47246.1	45898.0	41912.3	35453.3	26759.3	19307.2	11583.8	8285.2
17.5°	62952.6	75655.4	83558.2	86243.3	83558.2	75655.4	62952.6	46544.3	34681.0	22437.7	13060.1
15°	102305.0	121935.1	134294.7	138522.8	134294.7	121935.1	102305.0	79007.6	56086.2	37398.2	22437.7
12.5°	150155.1	178337.7	196411.5	202662.5	196411.5	178337.7	150155.1	118491.0	84574.7	56086.2	34681.0
10°	203290.9	239126.5	262803.2	271149.9	262803.2	239126.5	203290.9	161458.0	118491.0	79007.6	46544.3
7.5°	254948.2	300303.9	334296.9	345818.6	334296.9	300303.9	254948.2	203290.9	150155.1	102305.0	62952.6
5°	300303.9	358196.8	392703.7	404716.3	392703.7	358196.8	300303.9	239126.5	178337.7	121935.1	75655.4
2.5°	334296.9	392703.7	434868.6	458290.9	434868.6	392703.7	334296.9	262803.2	196411.5	134294.7	83558.2
0°	345818.6	404716.3	458290.9	491169.1	458290.9	404716.3	345818.6	271149.9	202662.5	138522.8	86243.3
-2.5°	334296.9	392703.7	434868.6	458290.9	434868.6	392703.7	334296.9	262803.2	196411.5	134294.7	83558.2
-5°	300303.9	358196.8	392703.7	404716.3	392703.7	358196.8	300303.9	239126.5	178337.7	121935.1	75655.4
-7.5°	254948.2	300303.9	334296.9	345818.6	334296.9	300303.9	254948.2	203290.9	150155.1	102305.0	62952.6
-10°	203290.9	239126.5	262803.2	271149.9	262803.2	239126.5	203290.9	161458.0	118491.0	79007.6	46544.3
-12.5°	150155.1	178337.7	196411.5	202662.5	196411.5	178337.7	150155.1	118491.0	84574.7	56086.2	34681.0
-15°	102305.0	121935.1	134294.7	138522.8	134294.7	121935.1	102305.0	79007.6	56086.2	37398.2	22437.7
-17.5°	62952.6	75655.4	83558.2	86243.3	83558.2	75655.4	62952.6	46544.3	34681.0	22437.7	13060.1
-20°	35453.3	41912.3	45898.0	47246.1	45898.0	41912.3	35453.3	26759.3	19307.2	11583.8	8285.2



REPORT NUMBER: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	-7.5°	-5°	-2.5°	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°
-22.5°	18137.5	21726.7	23928.6	24671.1	23928.6	21726.7	18137.5	13269.0	9557.2	7466.6	6130.4
-25°	8799.0	9753.7	10337.0	10533.2	10337.0	9753.7	8799.0	7496.4	6255.0	5942.4	5632.2
-27.5°	6073.9	6214.8	6300.6	6329.4	6300.6	6214.8	6073.9	5880.8	5640.3	5594.8	5542.9
-30°	5603.7	5624.0	5636.4	5640.5	5636.4	5624.0	5603.7	5575.8	5540.8	5526.1	5519.0
-32.5°	5525.9	5528.7	5530.3	5530.9	5530.3	5528.7	5525.9	5522.1	5517.3	5509.5	5498.4
-35°	5506.8	5511.1	5513.6	5514.5	5513.6	5511.1	5506.8	5500.9	5493.4	5468.5	5383.5
-37.5°	5428.6	5460.7	5480.2	5486.7	5480.2	5460.7	5428.6	5384.0	5327.6	5259.9	5144.4
-40°	5178.6	5222.3	5248.8	5257.6	5248.8	5222.3	5178.6	5117.9	5040.8	4948.1	4836.0
-42.5°	4840.6	4883.1	4908.7	4917.3	4908.7	4883.1	4840.6	4781.7	4706.7	4616.3	4396.8
-45°	4312.2	4447.9	4529.8	4557.2	4529.8	4447.9	4312.2	4123.5	3883.2	3593.0	3246.8
-47.5°	3038.8	3184.7	3272.7	3302.1	3272.7	3184.7	3038.8	2835.7	2576.9	2264.0	1898.7
-50°	1807.2	1820.5	1828.4	1831.1	1828.4	1820.5	1807.2	1788.8	1765.3	1736.8	1703.5
-52.5°	1679.6	1682.9	1684.8	1685.5	1684.8	1682.9	1679.6	1675.0	1669.2	1662.2	1653.9
-55°	1621.1	1635.0	1643.4	1646.2	1643.4	1635.0	1621.1	1601.7	1576.9	1546.8	1511.5
-57.5°	1433.7	1449.9	1459.6	1462.9	1459.6	1449.9	1433.7	1411.2	1382.3	1347.3	1306.2
-60°	1204.3	1218.0	1226.2	1228.9	1226.2	1218.0	1204.3	1185.3	1160.9	1131.3	1096.6
-62.5°	988.4	1001.1	1008.8	1011.3	1008.8	1001.1	988.4	970.7	948.1	920.6	888.3
-65°	767.5	778.4	784.9	787.1	784.9	778.4	767.5	752.3	732.9	709.3	681.6
-67.5°	558.8	566.5	571.1	572.7	571.1	566.5	558.8	548.0	534.1	517.3	497.5
-70°	388.8	395.5	399.5	400.9	399.5	395.5	388.8	379.4	367.3	352.6	335.4
-72.5°	222.8	227.2	229.8	230.7	229.8	227.2	222.8	216.7	208.9	199.3	188.1
-75°	100.0	101.7	102.8	103.1	102.8	101.7	100.0	97.6	94.5	90.8	86.4
-77.5°	43.4	43.9	44.1	44.2	44.1	43.9	43.4	42.8	42.0	41.1	39.9
-80°	25.7	25.9	26.1	26.1	26.1	25.9	25.7	25.4	25.0	24.5	24.0
-82.5°	14.5	14.6	14.7	14.7	14.7	14.6	14.5	14.3	14.1	13.9	13.6
-85°	6.4	6.5	6.5	6.5	6.5	6.5	6.4	6.4	6.3	6.2	6.1
-87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
-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: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
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CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2
85°	5.9	5.8	5.6	5.4	5.2	5.0	4.8	4.5	4.3	4.0	3.7
82.5°	13.2	12.8	12.4	11.9	11.4	10.8	10.2	9.6	8.9	8.2	7.5
80°	23.3	22.6	21.8	20.9	19.9	18.9	17.8	16.6	15.4	14.2	13.2
77.5°	38.7	37.2	35.6	33.8	31.9	29.8	27.6	25.6	24.0	22.4	20.6
75°	81.3	75.6	69.3	62.4	54.9	46.8	42.3	39.5	36.5	33.3	30.0
72.5°	175.3	160.8	144.7	127.1	107.9	95.8	85.7	74.9	63.5	51.5	42.6
70°	315.6	293.4	268.7	241.6	216.9	193.2	167.9	141.1	112.7	93.8	79.4
67.5°	474.8	449.3	421.1	390.2	357.0	321.2	283.0	242.6	207.6	174.0	138.8
65°	649.8	614.1	574.5	539.4	501.9	461.5	418.4	373.0	325.3	275.3	225.0
62.5°	851.3	809.7	764.7	716.6	664.6	608.7	553.8	503.3	450.0	394.3	336.7
60°	1056.9	1012.4	961.6	906.2	846.2	782.1	716.6	647.4	574.5	513.0	449.3
57.5°	1259.3	1208.2	1154.1	1095.1	1031.4	961.6	886.8	807.8	727.5	644.5	561.0
55°	1471.3	1416.1	1352.6	1283.4	1210.1	1135.8	1056.9	972.6	882.6	788.6	695.1
52.5°	1638.4	1589.3	1535.2	1476.3	1398.9	1312.4	1221.2	1131.3	1037.1	936.7	831.6
50°	1680.1	1668.7	1656.1	1628.7	1560.1	1487.0	1394.8	1290.8	1185.3	1079.9	969.5
47.5°	1796.7	1750.8	1700.4	1674.8	1658.9	1626.8	1543.7	1454.5	1338.1	1218.0	1101.5
45°	2796.7	2295.6	1822.7	1763.8	1700.7	1671.5	1652.4	1582.0	1484.7	1362.0	1228.9
42.5°	3981.5	3520.0	2965.7	2326.4	1812.5	1740.8	1680.0	1658.7	1601.3	1494.2	1362.0
40°	4707.3	4564.5	4039.7	3454.6	2749.5	1976.1	1765.1	1684.3	1660.9	1601.3	1484.7
37.5°	5013.0	4864.8	4697.5	4419.5	3753.0	3006.8	2144.3	1773.2	1684.3	1658.7	1582.0
35°	5288.0	5146.4	4976.7	4787.9	4584.1	3903.9	3093.3	2144.3	1765.1	1680.0	1652.4
32.5°	5479.6	5366.3	5237.3	5043.3	4833.7	4606.4	3903.9	3006.8	1976.1	1740.8	1671.5
30°	5508.6	5493.8	5414.3	5275.0	5065.7	4833.7	4584.1	3753.0	2749.5	1812.5	1700.7
27.5°	5524.1	5514.7	5497.9	5430.5	5275.0	5043.3	4787.9	4419.5	3454.6	2326.4	1763.8
25°	5570.0	5526.7	5516.0	5497.9	5414.3	5237.3	4976.7	4697.5	4039.7	2965.7	1822.7
22.5°	5708.2	5579.1	5526.7	5514.7	5493.8	5366.3	5146.4	4864.8	4564.5	3520.0	2295.6
20°	6194.1	5708.2	5570.0	5524.1	5508.6	5479.6	5288.0	5013.0	4707.3	3981.5	2796.7
17.5°	8285.2	6130.4	5632.2	5542.9	5519.0	5498.4	5383.5	5144.4	4836.0	4396.8	3246.8
15°	11583.8	7466.6	5942.4	5594.8	5526.1	5509.5	5468.5	5259.9	4948.1	4616.3	3593.0
12.5°	19307.2	9557.2	6255.0	5640.3	5540.8	5517.3	5493.4	5327.6	5040.8	4706.7	3883.2
10°	26759.3	13269.0	7496.4	5880.8	5575.8	5522.1	5500.9	5384.0	5117.9	4781.7	4123.5
7.5°	35453.3	18137.5	8799.0	6073.9	5603.7	5525.9	5506.8	5428.6	5178.6	4840.6	4312.2
5°	41912.3	21726.7	9753.7	6214.8	5624.0	5528.7	5511.1	5460.7	5222.3	4883.1	4447.9
2.5°	45898.0	23928.6	10337.0	6300.6	5636.4	5530.3	5513.6	5480.2	5248.8	4908.7	4529.8
0°	47246.1	24671.1	10533.2	6329.4	5640.5	5530.9	5514.5	5486.7	5257.6	4917.3	4557.2
-2.5°	45898.0	23928.6	10337.0	6300.6	5636.4	5530.3	5513.6	5480.2	5248.8	4908.7	4529.8
-5°	41912.3	21726.7	9753.7	6214.8	5624.0	5528.7	5511.1	5460.7	5222.3	4883.1	4447.9
-7.5°	35453.3	18137.5	8799.0	6073.9	5603.7	5525.9	5506.8	5428.6	5178.6	4840.6	4312.2
-10°	26759.3	13269.0	7496.4	5880.8	5575.8	5522.1	5500.9	5384.0	5117.9	4781.7	4123.5
-12.5°	19307.2	9557.2	6255.0	5640.3	5540.8	5517.3	5493.4	5327.6	5040.8	4706.7	3883.2
-15°	11583.8	7466.6	5942.4	5594.8	5526.1	5509.5	5468.5	5259.9	4948.1	4616.3	3593.0
-17.5°	8285.2	6130.4	5632.2	5542.9	5519.0	5498.4	5383.5	5144.4	4836.0	4396.8	3246.8
-20°	6194.1	5708.2	5570.0	5524.1	5508.6	5479.6	5288.0	5013.0	4707.3	3981.5	2796.7



REPORT NUMBER: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	20°	22.5°	25°	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°
-22.5°	5708.2	5579.1	5526.7	5514.7	5493.8	5366.3	5146.4	4864.8	4564.5	3520.0	2295.6
-25°	5570.0	5526.7	5516.0	5497.9	5414.3	5237.3	4976.7	4697.5	4039.7	2965.7	1822.7
-27.5°	5524.1	5514.7	5497.9	5430.5	5275.0	5043.3	4787.9	4419.5	3454.6	2326.4	1763.8
-30°	5508.6	5493.8	5414.3	5275.0	5065.7	4833.7	4584.1	3753.0	2749.5	1812.5	1700.7
-32.5°	5479.6	5366.3	5237.3	5043.3	4833.7	4606.4	3903.9	3006.8	1976.1	1740.8	1671.5
-35°	5288.0	5146.4	4976.7	4787.9	4584.1	3903.9	3093.3	2144.3	1765.1	1680.0	1652.4
-37.5°	5013.0	4864.8	4697.5	4419.5	3753.0	3006.8	2144.3	1773.2	1684.3	1658.7	1582.0
-40°	4707.3	4564.5	4039.7	3454.6	2749.5	1976.1	1765.1	1684.3	1660.9	1601.3	1484.7
-42.5°	3981.5	3520.0	2965.7	2326.4	1812.5	1740.8	1680.0	1658.7	1601.3	1494.2	1362.0
-45°	2796.7	2295.6	1822.7	1763.8	1700.7	1671.5	1652.4	1582.0	1484.7	1362.0	1228.9
-47.5°	1796.7	1750.8	1700.4	1674.8	1658.9	1626.8	1543.7	1454.5	1338.1	1218.0	1101.5
-50°	1680.1	1668.7	1656.1	1628.7	1560.1	1487.0	1394.8	1290.8	1185.3	1079.9	969.5
-52.5°	1638.4	1589.3	1535.2	1476.3	1398.9	1312.4	1221.2	1131.3	1037.1	936.7	831.6
-55°	1471.3	1416.1	1352.6	1283.4	1210.1	1135.8	1056.9	972.6	882.6	788.6	695.1
-57.5°	1259.3	1208.2	1154.1	1095.1	1031.4	961.6	886.8	807.8	727.5	644.5	561.0
-60°	1056.9	1012.4	961.6	906.2	846.2	782.1	716.6	647.4	574.5	513.0	449.3
-62.5°	851.3	809.7	764.7	716.6	664.6	608.7	553.8	503.3	450.0	394.3	336.7
-65°	649.8	614.1	574.5	539.4	501.9	461.5	418.4	373.0	325.3	275.3	225.0
-67.5°	474.8	449.3	421.1	390.2	357.0	321.2	283.0	242.6	207.6	174.0	138.8
-70°	315.6	293.4	268.7	241.6	216.9	193.2	167.9	141.1	112.7	93.8	79.4
-72.5°	175.3	160.8	144.7	127.1	107.9	95.8	85.7	74.9	63.5	51.5	42.6
-75°	81.3	75.6	69.3	62.4	54.9	46.8	42.3	39.5	36.5	33.3	30.0
-77.5°	38.7	37.2	35.6	33.8	31.9	29.8	27.6	25.6	24.0	22.4	20.6
-80°	23.3	22.6	21.8	20.9	19.9	18.9	17.8	16.6	15.4	14.2	13.2
-82.5°	13.2	12.8	12.4	11.9	11.4	10.8	10.2	9.6	8.9	8.2	7.5
-85°	5.9	5.8	5.6	5.4	5.2	5.0	4.8	4.5	4.3	4.0	3.7
-87.5°	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2
-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: P413446 (CONVERTED FROM TYPE C PHOTOMETRY)
 CATALOG NUMBER: EPH-08-0680R-40-80-2S-HEG

CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.5
85°	3.4	3.1	2.7	2.4	2.1	1.7	1.6	1.4	1.3	1.2	1.0
82.5°	6.7	6.1	5.7	5.1	4.6	4.1	3.5	3.0	2.4	1.8	1.5
80°	12.2	11.1	10.0	8.8	7.7	6.5	5.7	5.0	4.2	3.4	2.6
77.5°	18.8	17.0	15.0	13.5	12.0	10.5	8.9	7.3	6.0	5.1	4.1
75°	26.6	24.2	21.8	19.4	17.0	14.5	12.6	10.7	8.7	6.8	5.5
72.5°	38.6	34.4	30.1	25.8	22.9	19.9	16.9	14.0	11.8	9.5	7.1
70°	64.5	48.9	40.7	35.6	30.4	25.4	21.9	18.4	14.8	12.1	9.5
67.5°	102.7	85.2	67.1	48.4	39.6	33.6	27.4	22.9	18.9	14.8	11.8
65°	184.2	142.0	100.9	80.2	58.9	42.0	35.2	28.2	22.9	18.4	14.0
62.5°	276.8	218.8	170.8	121.4	88.1	64.2	42.8	35.2	27.4	21.9	16.9
60°	383.4	315.6	245.7	188.1	132.9	90.8	64.2	42.0	33.6	25.4	19.9
57.5°	489.2	414.9	339.1	261.3	193.9	132.9	88.1	58.9	39.6	30.4	22.9
55°	598.4	513.2	430.9	346.9	261.3	188.1	121.4	80.2	48.4	35.6	25.8
52.5°	725.8	618.6	521.3	430.9	339.1	245.7	170.8	100.9	67.1	40.7	30.1
50°	853.3	736.0	618.6	513.2	414.9	315.6	218.8	142.0	85.2	48.9	34.4
47.5°	980.5	853.3	725.8	598.4	489.2	383.4	276.8	184.2	102.7	64.5	38.6
45°	1101.5	969.5	831.6	695.1	561.0	449.3	336.7	225.0	138.8	79.4	42.6
42.5°	1218.0	1079.9	936.7	788.6	644.5	513.0	394.3	275.3	174.0	93.8	51.5
40°	1338.1	1185.3	1037.1	882.6	727.5	574.5	450.0	325.3	207.6	112.7	63.5
37.5°	1454.5	1290.8	1131.3	972.6	807.8	647.4	503.3	373.0	242.6	141.1	74.9
35°	1543.7	1394.8	1221.2	1056.9	886.8	716.6	553.8	418.4	283.0	167.9	85.7
32.5°	1626.8	1487.0	1312.4	1135.8	961.6	782.1	608.7	461.5	321.2	193.2	95.8
30°	1658.9	1560.1	1398.9	1210.1	1031.4	846.2	664.6	501.9	357.0	216.9	107.9
27.5°	1674.8	1628.7	1476.3	1283.4	1095.1	906.2	716.6	539.4	390.2	241.6	127.1
25°	1700.4	1656.1	1535.2	1352.6	1154.1	961.6	764.7	574.5	421.1	268.7	144.7
22.5°	1750.8	1668.7	1589.3	1416.1	1208.2	1012.4	809.7	614.1	449.3	293.4	160.8
20°	1796.7	1680.1	1638.4	1471.3	1259.3	1056.9	851.3	649.8	474.8	315.6	175.3
17.5°	1898.7	1703.5	1653.9	1511.5	1306.2	1096.6	888.3	681.6	497.5	335.4	188.1
15°	2264.0	1736.8	1662.2	1546.8	1347.3	1131.3	920.6	709.3	517.3	352.6	199.3
12.5°	2576.9	1765.3	1669.2	1576.9	1382.3	1160.9	948.1	732.9	534.1	367.3	208.9
10°	2835.7	1788.8	1675.0	1601.7	1411.2	1185.3	970.7	752.3	548.0	379.4	216.7
7.5°	3038.8	1807.2	1679.6	1621.1	1433.7	1204.3	988.4	767.5	558.8	388.8	222.8
5°	3184.7	1820.5	1682.9	1635.0	1449.9	1218.0	1001.1	778.4	566.5	395.5	227.2
2.5°	3272.7	1828.4	1684.8	1643.4	1459.6	1226.2	1008.8	784.9	571.1	399.5	229.8
0°	3302.1	1831.1	1685.5	1646.2	1462.9	1228.9	1011.3	787.1	572.7	400.9	230.7
-2.5°	3272.7	1828.4	1684.8	1643.4	1459.6	1226.2	1008.8	784.9	571.1	399.5	229.8
-5°	3184.7	1820.5	1682.9	1635.0	1449.9	1218.0	1001.1	778.4	566.5	395.5	227.2
-7.5°	3038.8	1807.2	1679.6	1621.1	1433.7	1204.3	988.4	767.5	558.8	388.8	222.8
-10°	2835.7	1788.8	1675.0	1601.7	1411.2	1185.3	970.7	752.3	548.0	379.4	216.7
-12.5°	2576.9	1765.3	1669.2	1576.9	1382.3	1160.9	948.1	732.9	534.1	367.3	208.9
-15°	2264.0	1736.8	1662.2	1546.8	1347.3	1131.3	920.6	709.3	517.3	352.6	199.3
-17.5°	1898.7	1703.5	1653.9	1511.5	1306.2	1096.6	888.3	681.6	497.5	335.4	188.1
-20°	1796.7	1680.1	1638.4	1471.3	1259.3	1056.9	851.3	649.8	474.8	315.6	175.3



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CANDELA DISTRIBUTION (continued):

	47.5°	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°
-22.5°	1750.8	1668.7	1589.3	1416.1	1208.2	1012.4	809.7	614.1	449.3	293.4	160.8
-25°	1700.4	1656.1	1535.2	1352.6	1154.1	961.6	764.7	574.5	421.1	268.7	144.7
-27.5°	1674.8	1628.7	1476.3	1283.4	1095.1	906.2	716.6	539.4	390.2	241.6	127.1
-30°	1658.9	1560.1	1398.9	1210.1	1031.4	846.2	664.6	501.9	357.0	216.9	107.9
-32.5°	1626.8	1487.0	1312.4	1135.8	961.6	782.1	608.7	461.5	321.2	193.2	95.8
-35°	1543.7	1394.8	1221.2	1056.9	886.8	716.6	553.8	418.4	283.0	167.9	85.7
-37.5°	1454.5	1290.8	1131.3	972.6	807.8	647.4	503.3	373.0	242.6	141.1	74.9
-40°	1338.1	1185.3	1037.1	882.6	727.5	574.5	450.0	325.3	207.6	112.7	63.5
-42.5°	1218.0	1079.9	936.7	788.6	644.5	513.0	394.3	275.3	174.0	93.8	51.5
-45°	1101.5	969.5	831.6	695.1	561.0	449.3	336.7	225.0	138.8	79.4	42.6
-47.5°	980.5	853.3	725.8	598.4	489.2	383.4	276.8	184.2	102.7	64.5	38.6
-50°	853.3	736.0	618.6	513.2	414.9	315.6	218.8	142.0	85.2	48.9	34.4
-52.5°	725.8	618.6	521.3	430.9	339.1	245.7	170.8	100.9	67.1	40.7	30.1
-55°	598.4	513.2	430.9	346.9	261.3	188.1	121.4	80.2	48.4	35.6	25.8
-57.5°	489.2	414.9	339.1	261.3	193.9	132.9	88.1	58.9	39.6	30.4	22.9
-60°	383.4	315.6	245.7	188.1	132.9	90.8	64.2	42.0	33.6	25.4	19.9
-62.5°	276.8	218.8	170.8	121.4	88.1	64.2	42.8	35.2	27.4	21.9	16.9
-65°	184.2	142.0	100.9	80.2	58.9	42.0	35.2	28.2	22.9	18.4	14.0
-67.5°	102.7	85.2	67.1	48.4	39.6	33.6	27.4	22.9	18.9	14.8	11.8
-70°	64.5	48.9	40.7	35.6	30.4	25.4	21.9	18.4	14.8	12.1	9.5
-72.5°	38.6	34.4	30.1	25.8	22.9	19.9	16.9	14.0	11.8	9.5	7.1
-75°	26.6	24.2	21.8	19.4	17.0	14.5	12.6	10.7	8.7	6.8	5.5
-77.5°	18.8	17.0	15.0	13.5	12.0	10.5	8.9	7.3	6.0	5.1	4.1
-80°	12.2	11.1	10.0	8.8	7.7	6.5	5.7	5.0	4.2	3.4	2.6
-82.5°	6.7	6.1	5.7	5.1	4.6	4.1	3.5	3.0	2.4	1.8	1.5
-85°	3.4	3.1	2.7	2.4	2.1	1.7	1.6	1.4	1.3	1.2	1.0
-87.5°	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.5
-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):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.4	0.3	0.2	0.1	0.1	0.0
85°	0.9	0.7	0.6	0.4	0.3	0.1	0.0
82.5°	1.3	1.1	0.9	0.7	0.4	0.2	0.0
80°	1.8	1.5	1.2	0.9	0.6	0.3	0.0
77.5°	3.1	2.1	1.5	1.1	0.7	0.4	0.0
75°	4.3	3.1	1.8	1.3	0.9	0.4	0.0
72.5°	5.5	4.1	2.6	1.5	1.0	0.5	0.0
70°	6.8	5.1	3.4	1.8	1.2	0.6	0.0
67.5°	8.7	6.0	4.2	2.4	1.3	0.7	0.0
65°	10.7	7.3	5.0	3.0	1.4	0.7	0.0
62.5°	12.6	8.9	5.7	3.5	1.6	0.8	0.0
60°	14.5	10.5	6.5	4.1	1.7	0.8	0.0
57.5°	17.0	12.0	7.7	4.6	2.1	0.9	0.0
55°	19.4	13.5	8.8	5.1	2.4	1.0	0.0
52.5°	21.8	15.0	10.0	5.7	2.7	1.0	0.0
50°	24.2	17.0	11.1	6.1	3.1	1.1	0.0
47.5°	26.6	18.8	12.2	6.7	3.4	1.1	0.0
45°	30.0	20.6	13.2	7.5	3.7	1.2	0.0
42.5°	33.3	22.4	14.2	8.2	4.0	1.3	0.0
40°	36.5	24.0	15.4	8.9	4.3	1.3	0.0
37.5°	39.5	25.6	16.6	9.6	4.5	1.3	0.0
35°	42.3	27.6	17.8	10.2	4.8	1.4	0.0
32.5°	46.8	29.8	18.9	10.8	5.0	1.4	0.0
30°	54.9	31.9	19.9	11.4	5.2	1.5	0.0
27.5°	62.4	33.8	20.9	11.9	5.4	1.5	0.0
25°	69.3	35.6	21.8	12.4	5.6	1.5	0.0
22.5°	75.6	37.2	22.6	12.8	5.8	1.6	0.0
20°	81.3	38.7	23.3	13.2	5.9	1.6	0.0
17.5°	86.4	39.9	24.0	13.6	6.1	1.6	0.0
15°	90.8	41.1	24.5	13.9	6.2	1.6	0.0
12.5°	94.5	42.0	25.0	14.1	6.3	1.7	0.0
10°	97.6	42.8	25.4	14.3	6.4	1.7	0.0
7.5°	100.0	43.4	25.7	14.5	6.4	1.7	0.0
5°	101.7	43.9	25.9	14.6	6.5	1.7	0.0
2.5°	102.8	44.1	26.1	14.7	6.5	1.7	0.0
0°	103.1	44.2	26.1	14.7	6.5	1.7	0.0
-2.5°	102.8	44.1	26.1	14.7	6.5	1.7	0.0
-5°	101.7	43.9	25.9	14.6	6.5	1.7	0.0
-7.5°	100.0	43.4	25.7	14.5	6.4	1.7	0.0
-10°	97.6	42.8	25.4	14.3	6.4	1.7	0.0
-12.5°	94.5	42.0	25.0	14.1	6.3	1.7	0.0
-15°	90.8	41.1	24.5	13.9	6.2	1.6	0.0
-17.5°	86.4	39.9	24.0	13.6	6.1	1.6	0.0
-20°	81.3	38.7	23.3	13.2	5.9	1.6	0.0



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CANDELA DISTRIBUTION (continued):

	75°	77.5°	80°	82.5°	85°	87.5°	90°
-22.5°	75.6	37.2	22.6	12.8	5.8	1.6	0.0
-25°	69.3	35.6	21.8	12.4	5.6	1.5	0.0
-27.5°	62.4	33.8	20.9	11.9	5.4	1.5	0.0
-30°	54.9	31.9	19.9	11.4	5.2	1.5	0.0
-32.5°	46.8	29.8	18.9	10.8	5.0	1.4	0.0
-35°	42.3	27.6	17.8	10.2	4.8	1.4	0.0
-37.5°	39.5	25.6	16.6	9.6	4.5	1.3	0.0
-40°	36.5	24.0	15.4	8.9	4.3	1.3	0.0
-42.5°	33.3	22.4	14.2	8.2	4.0	1.3	0.0
-45°	30.0	20.6	13.2	7.5	3.7	1.2	0.0
-47.5°	26.6	18.8	12.2	6.7	3.4	1.1	0.0
-50°	24.2	17.0	11.1	6.1	3.1	1.1	0.0
-52.5°	21.8	15.0	10.0	5.7	2.7	1.0	0.0
-55°	19.4	13.5	8.8	5.1	2.4	1.0	0.0
-57.5°	17.0	12.0	7.7	4.6	2.1	0.9	0.0
-60°	14.5	10.5	6.5	4.1	1.7	0.8	0.0
-62.5°	12.6	8.9	5.7	3.5	1.6	0.8	0.0
-65°	10.7	7.3	5.0	3.0	1.4	0.7	0.0
-67.5°	8.7	6.0	4.2	2.4	1.3	0.7	0.0
-70°	6.8	5.1	3.4	1.8	1.2	0.6	0.0
-72.5°	5.5	4.1	2.6	1.5	1.0	0.5	0.0
-75°	4.3	3.1	1.8	1.3	0.9	0.4	0.0
-77.5°	3.1	2.1	1.5	1.1	0.7	0.4	0.0
-80°	1.8	1.5	1.2	0.9	0.6	0.3	0.0
-82.5°	1.3	1.1	0.9	0.7	0.4	0.2	0.0
-85°	0.9	0.7	0.6	0.4	0.3	0.1	0.0
-87.5°	0.4	0.4	0.3	0.2	0.1	0.1	0.0
-90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





Horizontal Angle (degrees)



Horizontal Angle (degrees)

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

